EXHIBIT 3

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

TRIAL EXHIBIT 0062

CASE NO. 3:20-cv-06754-WHA

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Sonos™ Digital Music System

User Guide

Sonos Digital Music System User Guide.

For use with the Sonos ZonePlayer ZP100 (including Sonos System Setup software CD-ROM) and the Sonos Controller CR100.

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For the latest product documentation, go to **http://sonos.com/support** and click **Documents**.

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April, 2005

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The Sonos™ Digital Music System

It's the first and only multi-room digital music system with a wireless, full-color LCD screen Controller. This means you can now enjoy all your digital music, all over your home, and control it all from the palm of your hand.

With a Sonos Digital Music System you don't need a computer in every room, a music server, or a wireless computer network. Just a Sonos ZonePlayer and speakers in the rooms of your choice, and a Sonos Controller in hand to access all your digital music - no matter where it's stored.

Now you really can store your music wherever you please - on your computer, music server, network-attached storage (NAS) box, or even an external source like a CD player. Best of all, you can listen to music wherever you have Sonos ZonePlayers - in the bedroom, on the deck, or both.

Key Benefits

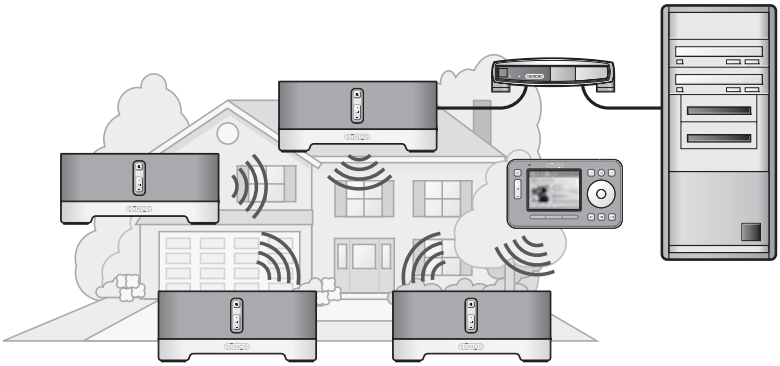
With a Sonos Digital Music System you can:

- Enjoy digital music in every room in your house - including outside
- Access your entire digital music collection easily using the Controller's full-color LCD screen and scroll wheel
- Control all your music and all your rooms from anywhere - wirelessly
- Play the same song in different rooms or different songs in different rooms
- Get great sound in every room

Sonos Digital Music System Components

- Sonos ZonePlayer ZP100, including the Sonos System Setup Software CD-ROM
- Sonos Controller CR100

Chapter 1



During setup, a unique *Household ID* is assigned to your Sonos Digital Music System. This ensures that your system operates independently and securely even if there are other Sonos Digital Music Systems in your neighborhood.

Your Computer Network

To play the digital music files stored on your computer, your computer network must meet the following requirements:

Network requirements

- You must have an Ethernet network interface connection in your computer. If you do not have one, you will need to buy and install a Network Interface Card (NIC) before proceeding.
- DSL/cable modem, or LAN-based, high-speed Internet connection recommended.
- If you have a cable or DSL modem connected directly to your computer, **you should have a router connected between your modem and your computer** to maintain your computer's security. If you do not have a router, you should buy and install one before proceeding.

System requirements

- 500 MHz processor or better
- 128 MB RAM minimum/256 MB RAM recommended
- Network hardware as described above

Compatible operating systems

- Windows® XP
- Windows® 2000
- Macintosh® OS X

Compatible playlist formats

- Rhapsody™
- iTunes®
- Musicmatch™
- Windows Media Player®
- WinAmp®

Compatible play formats

- MP3
- WMA (not including lossless)
- AAC (MPEG4)
- WAV (uncompressed)
- AIFF (uncompressed)
- FLAC (lossless)
- Ogg Vorbis

Sonos Online Services

- For the latest Sonos Digital Music System information, go to www.sonos.com.
- For product service and support, and the latest user documentation, go to http://support.sonos.com.

Technical Support

- **Web site**: For help with troubleshooting and support issues, visit our Web site at http://support.sonos.com
- **Telephone**: (800) 680-2345

Documentation Conventions

These symbols may appear in your Sonos Digital Music System documentation.

	Caution. This label warns against dangerous practices that may result in possible system failure or damage to the equipment.
	Warning. This label warns against dangerous practices that will result in personal injury or possible system failure.
	Note. Notes contain helpful suggestions or important information that should be emphasized.

Important Safety Information for the Sonos ZonePlayer

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer´s instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Unplug this apparatus during lightning storms or when unused for long periods of time.

13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

14. The Mains plug should be readily available to disconnect the equipment.

15. Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

16. Do not expose apparatus to dripping or splashing and do not place objects filled with liquids, such as vases, on the apparatus.

Caution *Household cleaners or solvents can damage the finish on your ZonePlayers or Controllers. Clean only with a dry soft cloth.*

USA

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced audio technician for help. Modifications not expressly approved by the manufacturer may void the user's authority to operate the equipment under FCC rules.

Canada

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210.

Industry Canada

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site *www.hc-sc.gc.ca/rpb*.

Europe

This product complies with the requirements of the R&TTE Directive (99-EC-5).

RF Exposure Requirements

To comply with FCC and EU exposure essential requirements, a minimum separation distance of 20cm (8 inches) is required between the equipment and the body of the user or nearby persons.

CE 0984 ⓘ **Attention.** In France, operation is limited to indoor use within the band 2.454-2.4835 GHz.

ZonePlayer Setup and Operation

ZonePlayer Package Contents

- Sonos ZonePlayer ZP100
- Sonos System Setup software CD-ROM
- Ethernet (network) cable
- Power cord
- Setup Instructions

Where to Begin

Carefully unpack your Sonos ZonePlayer(s). Then follow the step-by-step instructions on the following pages to ensure that you set up your speakers and your ZonePlayer(s) correctly.

Note: If you should experience any difficulty during the setup process, see Appendix A for additional help.

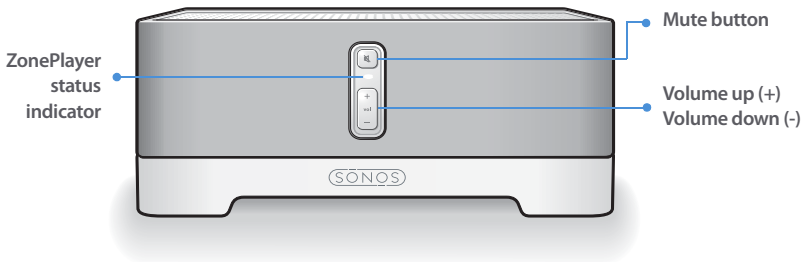
1-2-3 Setup

It takes just 3 steps to get your Sonos Digital Music System up and running:

1. Connect speakers to your ZonePlayer
2. Connect the first Sonos ZonePlayer (with Ethernet cable supplied) to your home network
3. Install the computer software (or use a Controller) to configure your music system

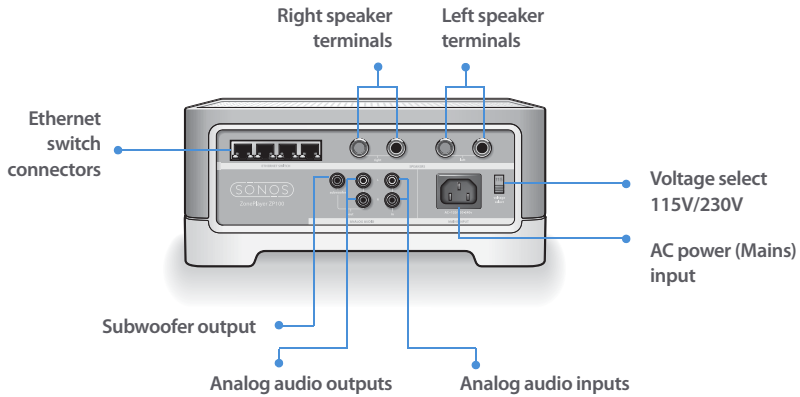
Chapter 2

ZonePlayer ZP100 Front



ZonePlayer status indicator	• Indicator *flashes white* when powering up or connecting to your Sonos Digital Music System. • Indicator is *solid white* when powered up and connected to your Sonos Digital Music System. • See "ZonePlayer LED Explanations" on page A-5 for additional status indications.
Mute button	**To mute/unmute this ZonePlayer**: Press the **Mute** button to mute or unmute this ZonePlayer. **To mute/unmute all ZonePlayers**: Press and hold the **Mute** button for 3 seconds to mute all ZonePlayers in your household. Press and hold for 3 seconds to unmute all ZonePlayers. **Mute button indicator:** • *Lights solid green* when sound is muted (and ZonePlayer Status LED is solid white). • *Flashes green rapidly* when household mute is about to take place. • *Flashes green slowly* when ZonePlayer is connecting to your music system.
Volume up (+) **Volume down (-)**	Press these buttons to adjust the volume up and down.

Rear Panel Connectors



Ethernet switch connectors (4)	Use Category 5 Ethernet cable to connect to a router, computer, or additional network device such as a network-attached storage (NAS) device. **LED indicators:** • Green (link connection) • Flashing Yellow (network activity)
Right speaker terminals	Use high-quality speaker wire to connect the right speaker to the ZonePlayer.
Left speaker terminals	Use high-quality speaker wire to connect the left speaker to the ZonePlayer.
Voltage select (AC 115/230 V)	**Up position**=AC 115 V, 120 V nominal (U.S./Canadian factory setting) **Down position**=230 V, 240 V nominal (European factory setting)
AC power (mains) input	Use the supplied power cord to connect to power outlet.
Analog audio outputs (variable)	You may use a standard RCA audio cable to connect the ZonePlayer's analog audio outputs to the audio inputs on a separate audio component, such as an amplifier or your home theater receiver.

Analog audio inputs	You may use a standard RCA audio cable to connect the ZonePlayer's analog audio inputs to the audio outputs from a separate audio component, such as a CD player or a portable music player.
Subwoofer output **Note:** If you disconnect your subwoofer, make sure to also disconnect the subwoofer's cable from the ZonePlayer output.	You may connect a powered subwoofer to this output using a standard RCA cable. The system will detect when a cable is connected to the subwoofer output and adjust the crossover frequency automatically.

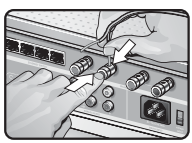
❶ Set Up Speakers and Apply Power

Follow the directions below to connect your speakers to the Sonos ZonePlayer ZP100. Your speaker's power rating should be at least 75W for 8 Ohm speakers and at least 150W for 4 Ohm speakers. **Do not connect speakers rated at less than 4 Ohms.**

To install speaker wire into the connector posts

Note: Be sure to connect the **red (+)** and **black (-)** terminals from each speaker to the corresponding terminals on the ZonePlayer. Mismatching of polarities will result in weak central sound, and a distorted sense of sound direction.

1. When making connections, ensure that none of the strands of your speaker wire come in contact with an adjoining terminal on the rear panel.
2. Use your thumb or finger to firmly push the spring-loaded speaker connector post inward to reveal the connection hole.



3. Insert the stripped end of the speaker wire into the hole, then release. The stripped portion should be caught firmly in the connector post.
4. Repeat to install the other speaker wires.
5. Attach the power cord to the ZonePlayer and plug into a wall outlet.

The Mute button indicator (green) and the ZonePlayer Status indicator (white) will begin to flash. (If this ZonePlayer was previously connected to another Sonos Digital Music System, the ZonePlayer Status indicator may light solid white instead.)

❷ Connect First ZonePlayer

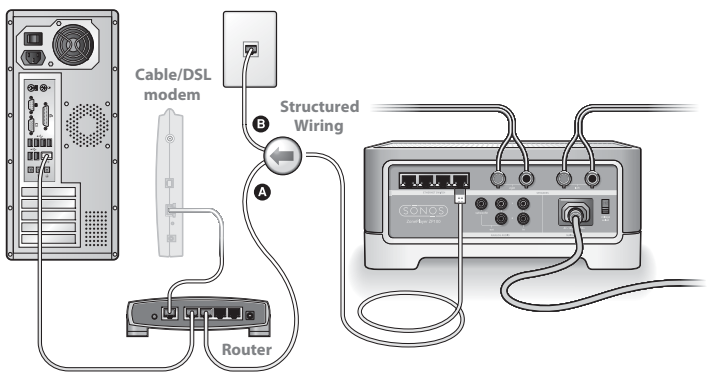
Note: The first ZonePlayer you install must connect to your home network using a standard Ethernet cable (supplied). If your computer only has a wireless connection, go to *http://faq.sonos.com/wireless* for assistance.

1. Connect the Ethernet cable from an open port on your router to any of the four (4) Ethernet switch connectors on the back of your ZonePlayer (see **A** in the diagram below).

   - **If your modem is currently plugged into the only network interface connector on your computer, you should install a router before continuing. If you don't have a router, go to *http://faq.sonos.com/norouter* for instructions.**

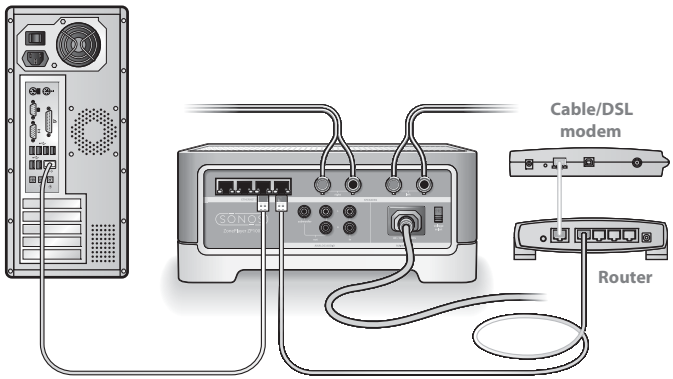
Or,

If you have structured (built-in) wiring that connects to a router located elsewhere in your home, you can connect the Ethernet cable from a live wall plate into one of the four Ethernet switch connectors on the back of your ZonePlayer (see **B** in the diagram below).



Note: To maintain your computer's security, do not connect the ZonePlayer directly to your cable/DSL modem.

2. If you don't have an open port on your router, you can disconnect your computer from the router and connect it to the ZonePlayer instead. Then you can connect the ZonePlayer into the router port the computer was previously plugged into.



Caution *Do not place any items on top of your ZonePlayer. This may impede the air flow and cause your ZonePlayer to overheat.*

❸ Install Software

Once your ZonePlayer is powered, you are ready to install the software. The Sonos System Setup software will guide you through the process of initializing your ZonePlayer(s) and setting up access to your music files.

- If your operating system is **Windows® XP** or **Windows® 2000**, turn to Chapter 3.
- If your operating system is **Macintosh® OS X**, turn to Chapter 4.
- If you have a **different operating system** or do not wish to install software, turn to Appendix C.

Adding More ZonePlayers

After your Sonos Digital Music System is up and running, you can add more ZonePlayers to your Sonos Digital Music System any time. Decide upon the best locations for your additional ZonePlayers. If your house has structured (built-in) wiring, you can make a *wired* connection to the additional ZonePlayers. If you don't have structured wiring, our built-in wireless technology is ideal for you.

Caution *Do not place any items on top of your ZonePlayer. This may impede the air flow and cause your ZonePlayer to overheat.*

When and why should I use a wireless connection?

The Sonos Digital Music system uses a built-in wireless connection to communicate between the various ZonePlayers. You can place ZonePlayers anywhere you wish without physically connecting them to your computer network, as long as they are within transmitting range (up to 100 ft. depending upon your home's layout). This means that you do not need to go to the effort of installing cables, and you can change the location of your ZonePlayer at any time.

Use wireless connections when:

- You do not want to install network cables
- You may want to move the location of the ZonePlayer
- There is enough signal strength for the ZonePlayer to transmit and receive data reliably

Note: Thick walls, microwave ovens, and the presence of other wireless devices can interfere with or block the wireless network signals from your Sonos Digital Music System. If you are experiencing difficulty, it is advisable to relocate the ZonePlayer, change the wireless channel your music system is operating on, or make a wired connection (Ethernet cable) either from your router to the ZonePlayer, or from one ZonePlayer to another. For more information on wireless connections, go to *http://support.sonos.com*.

To add a ZonePlayer

1. Place the ZonePlayer in the room you have selected.
2. Attach speakers to your ZonePlayer.
3. *If you are making a wired connection,* connect a standard Ethernet cable from either your router, another ZonePlayer, or a 'live' network wall plate to any of the Ethernet switch connections on the back of the new ZonePlayer.

   If you are making a wireless connection, skip this step and continue on to step 4.
4. Attach the supplied power cord to your ZonePlayer and plug into a wall outlet.

The Mute indicator (green) and the ZonePlayer Status indicator (white) will begin to flash. (If this ZonePlayer was previously connected to another Sonos Digital Music System, the ZonePlayer Status indicator may light solid white instead.)

5. Choose one of the following options and then follow the on-screen instructions:
   - Use the *Sonos Controller* to add the ZonePlayer to your Sonos Digital Music System by selecting **System Settings**→**Add a ZonePlayer** from the **Music** menu.

Or,

   - Use the *Desktop Controller* software (Windows users) to add the ZonePlayer to your Sonos Digital Music System by selecting **Zones**→**Zone Setup**→**Add**.

Or,

   - Use the *Sonos Setup Assistant* software (Macintosh users) to add the ZonePlayer to your Sonos Digital Music System by selecting **Set up ZonePlayers**→**Add** from the **Main Menu**.

During the setup process, you will be asked to press and release the **Mute** and **Volume Up** buttons simultaneously on the ZonePlayer you are adding to the Sonos Digital Music System.

- You may release the buttons as soon as the Mute indicator (green) and the ZonePlayer Status indicator (white) start to blink alternately (this takes approximately one second).
- When the ZonePlayer has been successfully added to your music system, the Mute indicator will go out and the ZonePlayer Status indicator will change to solid white.

Windows® Setup and Operation

Now that you have connected your first ZonePlayer, you are ready to install the Sonos Desktop Controller (DCR) software which will guide you through the process of configuring your music system and setting up access to your music files. The Desktop Controller software is compatible with Windows® 2000, Windows® XP, or later operating systems.

If you have digital music files stored on a computer or other device on your home network such as network-attached storage (NAS), the computer directories or folders that contain your music files must be *shared* so that the Sonos Digital Music System can access them. During setup the Desktop Controller software will automatically enable *Windows file sharing* for your computer.

For easy setup, you should install the Desktop Controller software on every Windows computer in your network that contains music files. However, if you wish to access music stored on a computer where file sharing is not enabled and the Desktop Controller software is not installed, review our FAQ Web site (*http://faq.sonos.com/sharing*) for information.

The Sonos Desktop Controller Software

The Sonos Digital Music System includes Desktop Controller software which allows you to control your Sonos Digital Music System from your desktop. It includes easy-to-use wizards for setup and music sharing so that the music folders on your hard drive can be shared across all ZonePlayers. Once your Sonos music system is set up, it's as easy as choosing a zone to play music in, making music selection(s), and pressing **Play**.

Chapter 3

Installing the Desktop Controller Software

1. Insert the Sonos System Setup CD-ROM (included with your ZonePlayer) and follow the on-screen instructions.

If the Desktop Controller software does not start automatically, run "d:\setup.exe", replacing "d" with your CD-ROM drive's letter as needed.

Note: *Firewall software such as Norton Internet Security™, McAfee™ Personal Firewall, ZoneAlarm®, or Windows® Service Pack 2 can block the operation of your Sonos Desktop Controller software. During installation, you may see prompts from your firewall software indicating that the Sonos application is attempting to perform certain operations.* ***You should always allow full access to the Sonos application****. You may also need to change the settings of your firewall software to ensure that Windows file sharing is not blocked. Go to our Web site at http//faq.sonos.com/firewall for detailed instructions.*

2. Click **Finish** when the Installation Wizard is complete. Remove the Sonos System Setup CD-ROM from the CD-ROM drive.

Starting the Sonos Setup Wizard

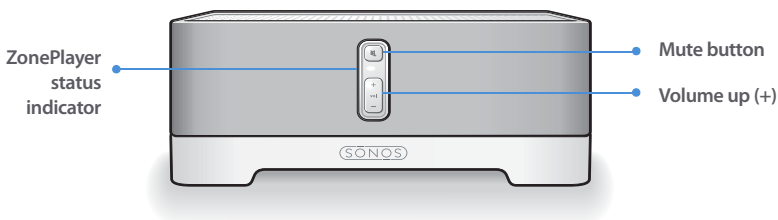
1. Start the Sonos Desktop Controller software.

   The **Sonos Setup Wizard** Welcome screen appears.

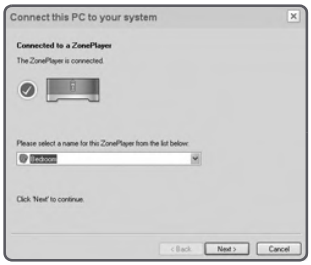
2. Click **Next**.

3. When instructed, press and release the **Mute** and **Volume Up** buttons simultaneously on the ZonePlayer you are connecting. (Remember, the first ZonePlayer you install must connect to your home network using a standard Ethernet cable).

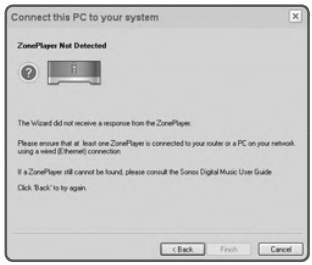
   You may release the buttons as soon as the Mute indicator (green) and the ZonePlayer Status indicator (white) start to blink alternately. This takes approximately one second.



Once the ZonePlayer is successfully connected, the ZonePlayer Status indicator will stop flashing and change to solid white (normal operation), and the Mute indicator will go off.



ZonePlayer added successfully



ZonePlayer not added
Consult the troubleshooting section of this user guide for assistance

4. Select a name for your ZonePlayer from the list, and then click **Next**.
5. Choose one of the following options:
   - If you wish to set up more ZonePlayers, select **Yes, I want to add more ZonePlayers**, click **Next,** and repeat step 3. You can add additional wired or wireless ZonePlayers to your music system in any order.
   - If you do not wish to add more, select **No, I do not wish to add another ZonePlayer at this time**, and click **Next**.
6. During the setup process, you will be asked to register your Sonos Digital Music System. Your registration information is necessary in order for us to be able to provide you with technical support and software upgrades.

Sonos will never give or sell your e-mail address to other companies

7. To set up access to your music folders, select **Yes, set up my music now** when prompted, and then click **Next.**
8. Click **Add a Share**.
9. Choose one of the following options:
   - To add a folder stored on this computer, select **Add music stored on this PC** and then select a folder you have music stored in (all subfolders will automatically be added).

Or,

   - To add music stored on a different computer or a NAS device, select **Add music stored in folders that are currently shared on my network.**
     a. Select a folder from the list or type the path name.
     b. If this folder is not shared anonymously, type the user name and password of a user with rights to access this music folder, and click **Next**.
     c. Click **Finish**.
10. If you purchased a Sonos Controller, you are now ready to add it to your music system. If it is not yet fully charged, plug the Sonos Controller into the power adapter and follow the on-screen prompts to add the Controller to your music system. You can use your Controller while it charges.

    During this process, you will be asked to press and release the **Mute** and **Volume Up** buttons simultaneously on one of the ZonePlayers you just set up in order to add the Controller to your music system. You may release the buttons as soon as the Mute indicator (green) and the ZonePlayer Status indicator (white) start to blink alternately. This takes approximately one second.
11. When you see the message **System is Now Setup**, touch the **OK** button.

Adding More ZonePlayers

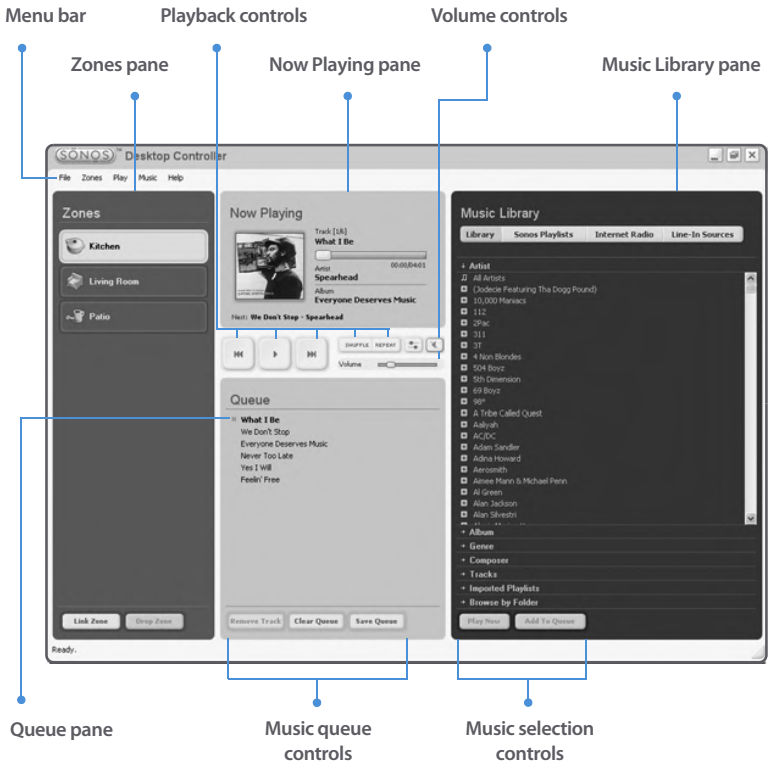
You can add more ZonePlayers to your Sonos Digital Music System any time by selecting Zones→Zone Setup→Add. Turn to Chapter 2 if you'd like help with the placement and setup of your new ZonePlayer(s).

Renaming a ZonePlayer

If you name a ZonePlayer incorrectly, or if you move your ZonePlayer to another room, you can rename it to suit your preference.

1. From the **Zones** menu, click **Zone Setup**.
2. Select the ZonePlayer you wish to change, and click **Rename**.
3. Select a name from the drop-down list, or type a new name for this ZonePlayer in the **Zone Name** field, and then click **Next**.
4. Click **Finish**.

The Desktop Controller Main Menu



You can select an action using the following method(s):

- Click the appropriate action button
- Select an action from the Menu bar
- Highlight a selection and then right-click

Playback Controls

The **Now Playing** pane displays track information for the music you are currently listening to. You can control the music settings for the current selection using the playback controls below:

Play/Pause

Toggles between playing and pausing the current track.

Next (single-click)

Click **Next** to jump to the start of the next track in the queue.

Fast forward (long press)

Click and hold down the **Next** button, or click and drag the progress bar to move forward through the current track. The music playback jumps to the new position when the button is released (while you are seeking, the song continues to play at the normal rate.) When the play indicator reaches the end of the track, play stops.

Previous (single-click)

Click this button to move backward. If you are more than 3 seconds into the track, **Previous** jumps to the start of the *current* track. If you are less than 3 seconds into the track, this button jumps to the start of the *previous* track (if no previous track exists, you are returned to the start of the current track.)

Rewind (long press)

Click and hold down the **Previous** button, or click and drag the progress bar to move backward through the current track. When the start of the track is reached, the play indicator stops. The music playback jumps to the new position when the button is released (while you are seeking, the song continues to play.)

Shuffle

Click **Shuffle** to play the tracks in the music queue in a random order.

Repeat

Click **Repeat** to repeat the queue list after the last track has finished.

Controlling the Volume

You can control the volume for an individual zone, or for a zone group if you have joined more than one room together. The volume change affects the zone or zone group currently highlighted in the **Zones** pane.

Volume Control

Click or drag the volume control bar to increase (+) or decrease (-) the volume. If a zone group is highlighted in the **Zones** pane, the volume applies to all zones in the group. If a single zone is highlighted, the volume applies to that zone only.

Equalizer

Click the **Equalizer** button to adjust the sound settings for a ZonePlayer, or to adjust the volume controls for an individual zone within a zone group.

Mute

Click the **Mute** button to mute the sound in a zone (if you have a zone group, all zones in the zone group are affected).

To mute a zone or zone group

1. From the **Zones** pane, click to highlight the zone you want to mute.
2. Choose one of the following options:
   - Click the **Mute** button. To unmute, click the **Mute** button again.

Or,

   - From the **Play** menu, click **Mute Selected Group**. To unmute, click **Unmute Selected Group.**
3. To mute all the ZonePlayers in your household, click **Mute Whole House** from the **Play** menu. To unmute all the Zoneplayers, click **Unmute Whole House** from the **Play** menu.

Adjusting ZonePlayer Sound Settings

You can change the sound settings (treble, bass, loudness, balance, or volume) for each individual ZonePlayer.

1. Choose one of the following options:
   - Click the **Equalizer** button displayed in the **Now Playing** pane.

Or,

   - Select **Equalizer** from the **Play** menu.

2. Click and drag the white adjustment control to adjust the bass, treble, volume, or balance settings. To mute a zone or zone group, or to adjust the loudness setting, click the appropriate button.
   - To change the volume for a *zone group*, use the group volume control on the left.
   - If you have two or more zones in a group, use the **Equalizer** screen to adjust the volume for each zone individually.

Managing Your Zones

The **Zones** pane allows you to view the music currently playing in any zone in your house. You can play a different song in each zone, or you can group zones together to play the same music when you are having a party or anytime you want the same music selection to play in more than one room. Zones can be managed from either the **Zones** pane or the **Zones** menu. From either of these, you can:

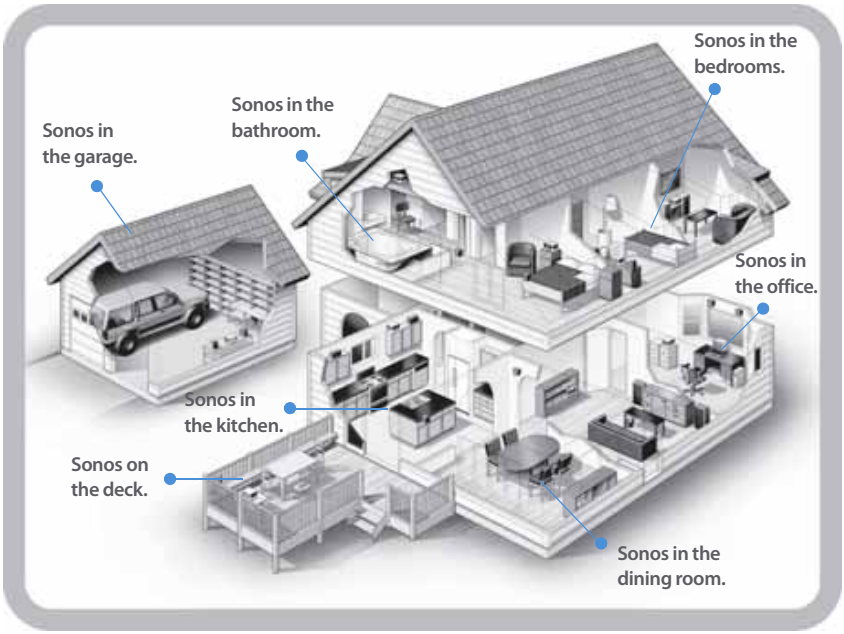
- See an alphabetical list of the zones in your house
- Link zones together to form a zone group
- Drop a zone from a zone group

Music will continue to play while you browse your zone settings.

The current zone is highlighted on your screen. The music selections you make will play in the highlighted zone.

Zone groups

A zone can be grouped together with any other zone(s) to form a zone group. This will cause all the zones in the zone group to play the same music. You can link or drop zones from a zone group while the music is playing. You can also link all the ZonePlayers in your house with one touch by selecting **All Zones-Party Mode**.



To link a zone to a zone group

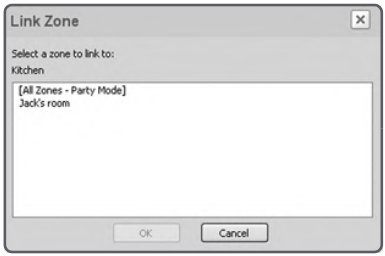
You can create a zone group first and then select music to play, or you can add a zone to a zone group where music is already playing.

Note: Any zones you link will automatically drop their current music queue and begin to play the music queue from the highlighted zone. You may sometimes want to save your music queue before linking a zone. See "To create a Sonos playlist" on page 3-17.

1. From the **Zones** pane, highlight the zone you want to link another zone or zone group to.
2. Choose one of the following options:
   - Click **Link Zone.**

Or,

   - From the **Zones** menu, click **Link Zone.**



3. Select a zone to add to the group, and click **OK.** If you want to join all the zones in your house to this music queue, select **All Zones-Party Mode**. All of your ZonePlayers will then play the same music until you drop the zones from the zone group.

Note: The order in which you add a zone makes a difference. If you select **Link Zone** from a zone where there is no music playing, any zone you link to it will also be silent.

To drop a zone from your zone group

1. From the **Zones** pane, highlight the zone group you want to change.
2. Choose one of the following options:
   - Click **Drop Zone**.

Or,

   - From the **Zones** menu, click **Drop Zone**.

3. Select the zone you want to unlink from the group, and click **OK**.

   The zone that's removed from the zone group stops playing music. The other rooms in the zone group continue unaffected.

Making Music Selections

Use the **Music Library** pane to select the music you wish to play. You can select from any of the following music sources:

- Library (shared folders on your network)
- Music services
- Sonos playlists (music queues you have saved for future play)
- Internet Radio
- Line-In Sources (external device such as a CD player or a portable music player)

Note: The music you select will play in the zone or zone group that is highlighted in the **Zones** pane.

Managing your music library

Your music library can include digital music located anywhere on your home network such as:

- shared folders on your computer
- shared folders on another computer in your network
- network-attached storage (NAS) devices

The Sonos Digital Music System does not change music or playlist files created by other applications; these files are always treated as "read-only".

The Music Queue

As you make music selections, they are added to a list of tracks called a *music queue*. You can create a different music queue for each zone in your house, or you can create a zone group and play the same music across multiple zones. A play indicator appears to the left of the track currently playing in the music queue. When the current track ends, the next track in the queue starts to play, and play continues down through the list until the queue is completed. When you add tracks to a queue, they are placed at the end of the queue.

Note: You can add tracks to a music queue while listening to other music.

Browsing and selecting music

You can browse the Music Library in various ways. You can make a broad music selection like *play all available music by a particular artist*, or make a specific selection like *play a single track on a specified album*. Your search and selection choices include:

- Artist
- Album
- Genre
- Composer
- Tracks

- Imported Playlists
- Browse by Folder

Note: If a computer on your network is turned off or is in *standby* mode, the music folders on that computer will be unavailable to the Sonos Digital Music System until the computer is turned back on.

To select from your music library

1. From the **Zones** pane, click to highlight the zone you want to play music in.
2. Choose one of the following options:
   - From the **Music Library** pane, click the **Library** tab.

Or,

   - From the **Music** menu, click **Music Library**.
3. Use the mouse to move through the list until you reach the choice you want. To play all songs by an artist, on an album, or in a genre, highlight the selection and click **Play Now** to play the music now, or **Add to Queue** to add it to the end of your music queue. Click ⊞ to expand the music tree for any selection.

If you've created Sonos playlists (music queues you have saved), you can browse these playlists using the **Sonos Playlists** tab. See "Sonos Playlists" on page 3-17 for more information.

Managing your music queue

Once you have added tracks to a queue, you can make changes to the music queue using the playback buttons, the **Play** menu options, or the queue control buttons. You can:

- Remove a track from the queue
- Clear the entire music queue
- Click the **Shuffle** button to play the tracks in the music queue in a random order
- Click the **Repeat** button to repeat the music queue after the last track has finished
- Save a queue as a Sonos playlist

To remove a track from the music queue

1. From the **Queue** pane, click to highlight the song you want to remove from the music queue.
2. Choose one of the following options:
   - Click **Remove Track**.

Or,

   - Select **Queue→Remove Track** from the **Play** menu.

   The track disappears from the queue list.

To clear the music queue

1. Choose one of the following options:
   - Click **Clear Queue** from the bottom of the **Queue** pane.

Or,

   - Click **Queue→Clear Queue** from the **Play** menu.
2. Click **Yes** to confirm.

   This will clear the entire queue and stop the music from playing.

To change the play mode

1. Click the **Shuffle** or **Repeat** buttons displayed in the **Now Playing** pane to change the play mode.

The selected play mode appears as an icon in the **Now Playing** pane.

Shuffle

Repeat

Repeat/Shuffle

Sonos Playlists

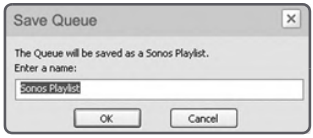
Sonos playlists are music queues you create and save for future listening. For example, you might want to create a *jazz* playlist, a *party* playlist, or an *easy listening* playlist.

To create a Sonos playlist

1. Create a music queue by selecting music tracks from your music library.
2. Choose one of the following options:
   - From the **Queue** pane, click **Save Queue**.

Or,

   - Click **Queue→Save Queue as Sonos Playlist** from the **Play** menu.



3. Type a name for the new Sonos playlist, and click **OK**. This queue will now be accessible from the **Sonos Playlists** tab.

4. To play a saved queue, click the desired playlist from the **Sonos Playlists** tab and click **Play Now** to start the playlist immediately, or **Add to Queue** to add it to the end of your current music queue.

To delete a Sonos playlist

1. From the **Sonos Playlists** tab, highlight the playlist you want to delete.
2. Choose one of the following options:
   - Click **Delete**.

Or,

   - Click **Delete Sonos Playlist** from the **Music** menu.

Internet Radio

The **Internet Radio** tab provides a list of third-party streaming MP3 broadcasts for you to select from. Simply select the zone you want to listen in, select a radio station from the list, and then click **Play Now**.

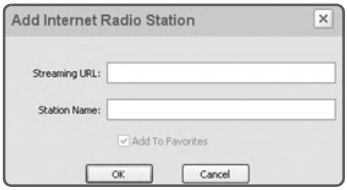
To add an Internet radio station

You can add a radio station that does not appear in your pre-configured list. You must know the streaming URL, and the station must use the streaming MP3 broadcast format. This station will be added to your *Favorites* list.

1. Click the **Internet Radio** tab.
2. Choose one of the following options:
   - Click **Add New**.

Or,

   - Click **Add New Internet Radio Station** from the **Music** menu.



3. Type the streaming URL for the radio station you want to add to your station list.

4. Type the radio station's name in the **Station Name** field, and click **OK**.

   The new radio station is added to your *Favorites* list, not to the Sonos-supplied Internet radio station list.

To edit a radio station

Note: You can only edit the streaming URL or station name for radio stations that are in your *Favorites* list. However you can always add a radio station to your Favorites list using the **Edit** option.

1. Click the **Internet Radio** tab.
2. Click to highlight an Internet radio station, and then click **Edit**.
3. Change the streaming URL, the station name, or click **Add to Favorites** to add the station to your *Favorites* list, and click **OK**.

To add a station to your Favorites list

You can add any of the pre-configured radio stations to your *Favorites* list. The station is duplicated in your Favorites folder, not moved from the original Internet Radio list. Highlight a station from the Internet radio list and then choose one of the following options:

- Click **Add to Favorites**.

Or,

- Select **Edit Internet Radio Station** and click **Add to Favorites**.

To delete a station from your Favorites list

1. From the **Internet Radio** tab, highlight the station you want to delete from your Favorites Stations list.
2. Choose one of the following options:
   - Click **Delete**.

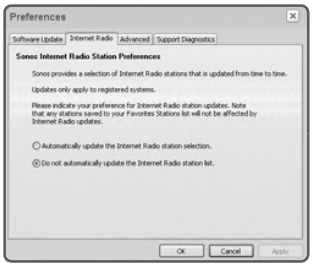
Or,

   - Select **Remove Station from Favorites** from the **Music** menu.
3. Click **Yes** to confirm.

To set Internet radio preferences

You can receive automatic radio station updates whenever Sonos releases a new list. Your music system must be registered in order to receive updates. If you have not yet registered, see "Sonos System Registration" on page 3-27.

1. From the **File** menu, select **Preferences**.
2. Click the **Internet Radio** tab.



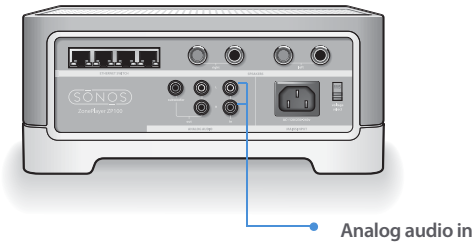
3. Select the desired setting, and click **OK**.

Connecting Line-In Sources

You can play music from an external source device such as a CD player or a portable music player that is connected to your Sonos Digital Music System.

Note: You can listen to music from an external device in any zone, and use the Sonos Digital Music System to control the volume settings. However, you must control the playback (forward, pause, etc.) from the line-in source. If you have WMA encoding selected, you will notice a slight delay before the music starts to play.

1. Use a standard RCA cable to plug the external source into the analog *Audio In* connections on the back of your ZonePlayer. The source device will automatically be detected.



2. From the **Music Library** pane, click the **Line-In Sources** tab.
3. Highlight the line-in source you wish to play music from, and click **Play Now**.

Managing Music Folders

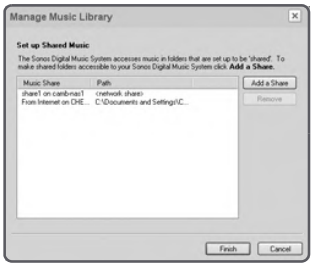
The Sonos Digital Music System can play music from any compatible networked computer or network-attached storage (NAS) device where you have shared music folders stored. During the setup process, you are guided through the process of accessing these shared music folders. Over time, you may wish to add or remove music folders from this list.

These music folders are indexed by the Sonos Digital Music System so that you can view your music by categories. If you add new music to a folder that has already been indexed, you can update your music index to add this music to your library.

To add a shared folder

1. From the **Music** menu, select **Music Library Setup**.

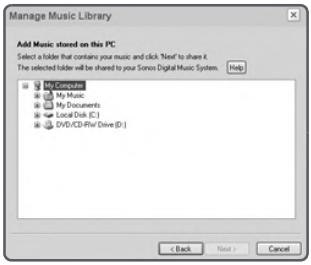
The shared music folders that are currently available to your Sonos Digital Music System appear.



2. Click **Add a Share**.

3. Choose one of the following options:

   - To add music that is stored on this computer, select **Add music stored on this PC**, and click **Next.**

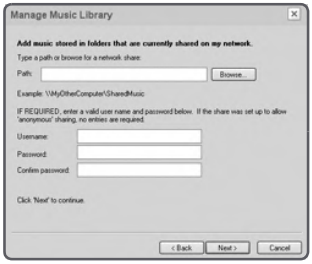


a. Click to highlight a music folder, and then click **Next**.

b. Click **Next** to confirm.

c. Click **Finish** when you have no more folders to add.

- To add music stored on a remote computer or a NAS device, select **Add music stored in folders that are currently shared on my network.**



a. Type a network path for the music folder, or click **Browse** to search for it.

b. If it is not shared anonymously, enter the user name and password, and click **Next**.

c. Click **OK** to confirm.

d. Click **Finish** when you have no more folders to add.

To remove a shared folder

1. From the Music Library Setup screen, highlight the share you want to remove from the list, and click **Remove**.
2. Click **Yes** to confirm.

To update your music index

If you add new music to a folder that is already indexed, you can update your music index to add this music to your library.

1. From the **Music** menu, select **Update Music Index Now**.
2. Click **Yes** to confirm.

The message, "updating music index" appears at the bottom of the screen. When the update is complete, the message "ready" appears.

Getting Software Updates

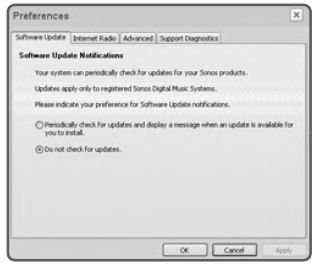
Sonos provides software updates for your music system in order to improve performance and add features. Your music system must be registered in order to receive software updates. If you have not yet registered, see "Sonos System Registration" on page 3-27.

There are two options available:

- Periodically check for updates and send a message when an update is available. A message window will appear when you start the Desktop Controller software indicating there are updates available.
- Do not notify me when updates or notifications are available.

To set software update preferences

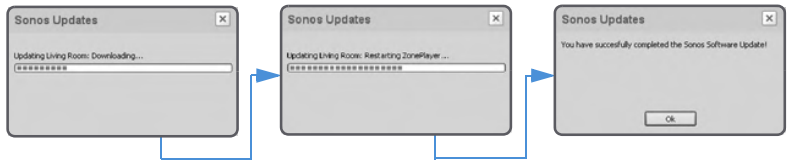
1. From the **File** menu, select **Preferences**. The **Software Update** tab is displayed.



2. Select the desired setting, and click **OK**.

To download software updates

1. From the **Help** menu, select **Check for Updates**.
2. If there are updates available, click **Update Now** to download.



If your software is up to date, the message "Your Sonos Digital Music System is up to date. No updates are required" will appear instead.

Your ZonePlayers and computer software will be updated as all Sonos components must carry the same software version number. This process may take several minutes per device, depending upon your network connection. **Your Sonos Desktop Controller software window will automatically close and then re-open during the update process**. You must then update your Controller as well by following the on-screen prompts.

Caution *Do not disconnect power from your ZonePlayer(s), or in any way disable your Sonos Digital Music System while this process is running. Contact Sonos Customer Support if an error occurs.*

ZonePlayer(s) software updates

If a ZonePlayer's software version gets out of sync from the rest of your Sonos Digital Music System components, you will see the following message displayed in the **Zones** pane:

One or more ZonePlayers may need to be updated if you purchase a new ZonePlayer with a later software version, or if you plug in a ZonePlayer that was not in use when you performed your last software update.

Click **Yes** to begin the software update process.

Advanced Preferences

Upon occasion, it may become necessary to adjust some of the default settings for your Sonos Digital Music System. The **Advanced Preferences** menu option allows you to change the wireless channel your Sonos Digital Music System operates on, as well as change the encoding method for line-in source devices you may connect to your music system.

Selecting a different wireless channel

The Sonos Digital Music System selects the optimal radio frequency channel during setup. However, if you have other wireless devices using this channel, you may want to switch the Sonos Digital Music System to another channel to avoid conflicts, as conflicts may cause audio drop-outs.

1. From the **File** menu, select **Preferences**.
2. Click the **Advanced** tab.
3. Select another wireless channel from the **Wireless Channel** list, and click **OK**.

It may take several seconds for the switch to take effect. If you have music playing, a short music dropout will occur during the wireless channel change.

Line-in encoding

If you have line-in music sources attached to a ZonePlayer, line-in encoding determines how the Sonos Digital Music System will encode the audio coming in from these sources. WMA encoding is the high-quality system default. For the highest quality sound you can select WAV uncompressed encoding (this selection requires more network bandwidth than WMA compressed audio).

1. From the **File** menu, select **Preferences**.
2. Click the **Advanced** tab.
3. Select **WMA** or **WAV** from the **Line-In Encoding** list, and click **OK**. When WMA is selected, you will notice a slight delay before the music starts to play.

Sonos System Registration

During the setup process, you are asked to register your Sonos Digital Music System. If you did not register at that time, you can register now by selecting **Help→Sonos System Registration**. Registering your music system allows you to receive technical support as well as software upgrades. At no time is any of your information provided to other companies.

Turning Off All ZonePlayers

If you want to stop your Sonos Digital Music System from playing music, press **Pause All** from the **Play** menu. All of your ZonePlayers will remain *off* until you touch **Play** to restart each zone or zone group.

Resetting Your Desktop Controller Software

If you want to join your computer to a different Sonos Digital Music System, you must *reset* your Desktop Controller.

1. Select **Reset Desktop Controller** from the **Help** menu.
2. Click **Yes**.

Your Desktop Controller window will automatically close. The next time you start the Desktop Controller software, the Setup Wizard will appear to prompt you through the setup process. If you are joining your computer to an existing Sonos Digital Music System, you do not have to press the **Mute** and **Volume Up** buttons on every ZonePlayer again - just one that is connected to your system via an Ethernet cable.

Macintosh® OS X Setup and Operation

The Sonos Setup Assistant

Now that you have connected your first ZonePlayer, you are ready to install the Sonos Assistant. The Sonos Setup Assistant software for Macintosh will guide you through the process of configuring your music system and setting up access to your music files.

If you have digital music files stored on a Macintosh computer or other device on your home network such as network-attached storage (NAS), the computer directories or folders that contain your music files must be *shared* so that the Sonos Digital Music System can access them. During setup, the Sonos Setup Assistant software will guide you through the process of enabling *Windows file sharing* on your Macintosh computer if it is not already enabled.

For easy setup, you should install the Setup Assistant software on every Macintosh computer in your network that contains music files. However, if you wish to access music stored on a computer where file sharing is not enabled and the Setup Assistant software is not installed, review our FAQ Web site (*http://faq.sonos.com/sharing*) for information.

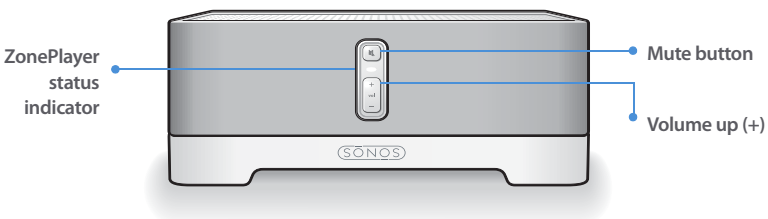
Installing the Sonos Setup Assistant Software

1. Insert the Sonos System Setup CD-ROM (included with your ZonePlayer ZP100).
2. Double-click the icon, and follow the on-screen instructions.

Chapter 4

3. During the setup process, you will be asked to configure your Macintosh's firewall. Follow the on-screen instructions, and then click **Continue**.

4. During the setup process, you will be asked to press and release the **Mute** and **Volume Up** buttons simultaneously on the ZonePlayer you are adding to your music system.You may release the buttons as soon as the Mute indicator (green) and the ZonePlayer Status indicator (white) start to blink alternately. This takes approximately one second.



Once the ZonePlayer is successfully added to your music system, the ZonePlayer Status indicator will stop flashing and change to solid white (normal operation), and the Mute indicator will go off.

5. Choose a ZonePlayer name from the pop-up menu, and then click **Continue**.

6. Choose one of the following options:
   - If you have another ZonePlayer to set up now, choose **Yes, I want to add another ZonePlayer** and click **Continue**.
   - If you don't want to set up another ZonePlayer, choose **I do not want to add another ZonePlayer at this time**, and click **Continue**.
7. You are now ready to set up access to your music folders. Choose **Yes, set up my music now**, and click **Continue**.

Where is your music stored?

You will be asked where your music is stored. The setup steps will vary depending upon where your music folders are located. Follow the instructions that correspond to your storage location(s) in order to complete the setup process.

- Depending upon where your music is stored, you may be asked to provide an administrator name and password to allow access to your music folders.
- If your Macintosh computer does not have *Windows Sharing* enabled, the Sonos Setup Assistant will guide you through the process of enabling it. Your music files are never copied from their current locations - your folders are simply shared out so they can be accessed by your Sonos Digital Music System.

Connecting your Controller

Once setup is complete, if you purchased a Sonos Controller you can add it to your music system now.

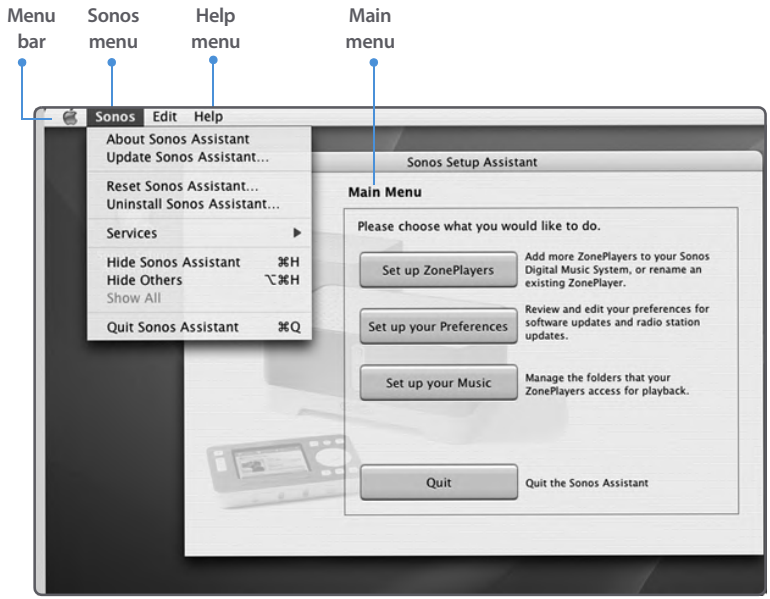
1. Plug your Sonos Controller into the AC adapter and follow the on-screen prompts to add the Controller to your music system.

   During this process, you will be asked to press and release the **Mute** and the **Volume Up** buttons simultaneously on one of the ZonePlayers you have set up. You may release the buttons as soon as the Mute indicator (green) and the ZonePlayer Status indicator (white) start to blink alternately. This takes approximately one second.
2. When you see the message, **System is Now Setup** touch the **OK** button.

The Sonos Assistant Main Menu

Once setup is complete, open the Sonos Assistant any time you wish to:

- Add more ZonePlayers
- Rename a ZonePlayer
- Change your preferences for software updates or Internet radio
- Add or remove access to your shared music folders
- Reset the Sonos Assistant



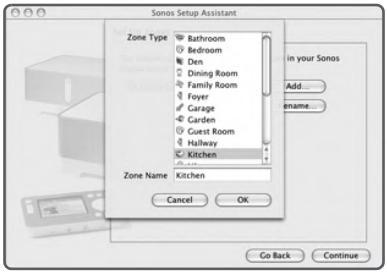
Adding More ZonePlayers

You can add more ZonePlayers to your Sonos Digital Music System any time by selecting **Set up ZonePlayers** from the **Main Menu**. Turn to Chapter 2 if you'd like help with the placement and setup of your new ZonePlayer(s).

Renaming a ZonePlayer

If you name a ZonePlayer incorrectly, or if you move your ZonePlayer to another room, you can rename it to suit your preference.

1. From the **Main Menu**, click **Set up ZonePlayers**.
2. Highlight the ZonePlayer you wish to change, and click **Rename**.



3. Choose a name from the list, or type a new name for this ZonePlayer in the **Zone Name** field, and then click **OK**.
4. Click **Continue**.

Changing Your Preferences

Upon occasion, it may become necessary to adjust some of the default settings for your Sonos Digital Music System.

Software update preferences

Sonos provides software updates for your music system in order to improve performance and add features. Your music system must be registered in order to receive these software updates. If you have not yet registered, see "System registration" on page 5-29.

1. From the **Main Menu**, select **Set up your Preferences**.

2. Choose one of the following options:

   - Select **Notify me when updates become available.** A message will appear on your **Sonos Controller** to indicate there are updates available.

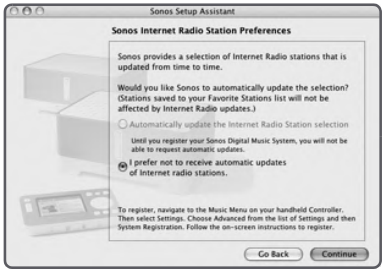
Or,

   - Select **I prefer not to receive notifications when updates become available**. You should periodically check for updates using your Controller.

Internet radio preferences

You can receive automatic radio station updates whenever Sonos releases a new list. Your music system must be registered in order to receive updates. Change your preference option by following the steps below:

1. From the **Main Menu**, choose **Set up your Preferences**.
2. Click **Continue** to display the **Internet Radio Station Preferences** screen.



3. Select the desired setting, and click **Continue**.

Updating Your Sonos Assistant Software

You can check for updates to the Sonos Assistant software by choosing **Update Sonos Assistant** from the **Sonos** menu. This option will automatically take you to the Sonos Support Web site where a message displays indicating whether or not there is a later version available for you to download.

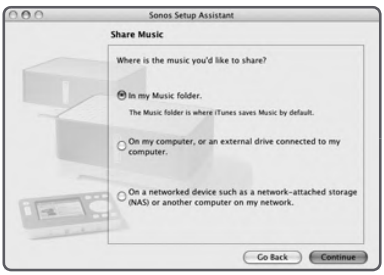
Managing Music Folders

The Sonos Digital Music System can play music from any compatible network computer or network-attached storage device where you have shared music folders stored. During the setup process, you are guided through the process of accessing these shared music folders. Over time, you may wish to add or remove music folders from this list.

To add a shared music folder to the list

1. From the **Main Menu**, choose **Set up your music**.
2. The music folders that are currently being accessed are displayed.

3. Click **Add**.



- If you select **In My Music Folder**, click **Continue** and then turn to "If you have music stored in your music folder..." on page 4-9.
- If you select **On My Computer,** click **Continue,** and then turn to "If you have music stored elsewhere on your computer..." on page 4-9.
- If you select **On a networked device such as network-attached storage or another computer**, click **Continue** and then turn to "If you have music stored on the network..." on page 4-10.

If you have music stored in your music folder...

1. Provide an administrator name and password, and then click **Continue**.

If Windows Sharing is already enabled on your computer, this screen will not appear

2. If your computer does not currently allow Windows Sharing, you will be prompted to enable it.
   - If your operating system is 10.3, press the **Open It For Me** button and follow the on-screen instructions.
   - If your operating system is 10.2, click the **Using OS X 10.2** tab and follow the on-screen instructions.
3. Click **Continue**.
4. Choose one of the following options:
   - Click **Add** to add another music folder.

Or,

   - Click **Continue** if you have no more music folders to add.

If you have music stored elsewhere on your computer...

1. Click **Browse** to choose a music folder, and then click **Continue**.
2. If required, you may be asked to provide an administrator name and password.
3. If this device does not currently allow Windows Sharing, you will be prompted to enable it.
   - If your operating system is 10.3, press the **Open It For Me** button and follow the on-screen instructions.
   - If your operating system is 10.2, click the **Using OS X 10.2** tab and follow the on-screen instructions.

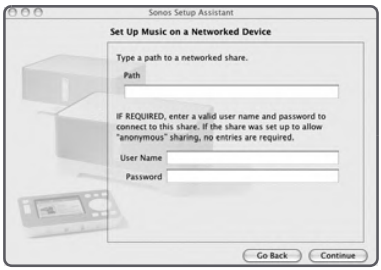
4. Choose one of the following options:
   - Click **Add** to add another music folder.

Or,

   - Click **Continue** if you have no more music folders to add.

If you have music stored on the network...

1. Type the path name for the music folder and, if necessary, the user name and password of a user with rights to access this networked device, and click **Continue.**



2. Click **Continue.**
3. Choose one of the following options:
   - Click **Add** to add another music folder.

Or,

   - Click **Continue** if you have no more music shares to add.

To remove a shared music folder from the list

1. From the **Main Menu**, choose **Set up your music**.
2. Highlight the folder you want to stop accessing music from, and click **Remove**.
3. Click **Remove** to confirm.
4. You may be asked to provide an administrator name and password.
5. Click **Continue** when you have no more folders to remove from the list.

Resetting the Sonos Assistant

If you want to join your Macintosh computer to a different Sonos Digital Music System, you must *reset* your Sonos Assistant.

1. Choose **Reset Sonos Assistant** from the **Sonos** menu.
2. Click **Reset**.
3. Click **Quit**.

The next time you start the Sonos Assistant software, the Setup Wizard will appear to prompt you through the setup process. If you are joining this computer to an existing music system, you do not have to press the **Mute** and **Volume Up** buttons on every ZonePlayer again - just one that is connected to your system via an Ethernet cable.

Uninstalling the Sonos Assistant

If at some point you wish to completely remove the Sonos Assistant from your Macintosh computer, choose **Uninstall Sonos Assistant** from the **Sonos** menu. The Sonos Digital Music System will no longer be able to access music from this computer.

Using Your Sonos™ Controller

Sonos puts the control of all your music and all your rooms in the palm of your hand. With a Sonos Controller in hand, you'll have instant access to your entire digital music collection, no matter where it's stored. And because it's wireless, you can control the music and where it's being played from any room in your house - with no pointing or line of sight requirements. That means no more moving from room to room to turn on, change, or turn off the music throughout your home.

The full-color LCD screen and intuitive scroll wheel make everything from browsing songs to choosing zones incredibly easy. Simply choose a zone to play music in, make your music selection(s), and touch **Play**.

Features

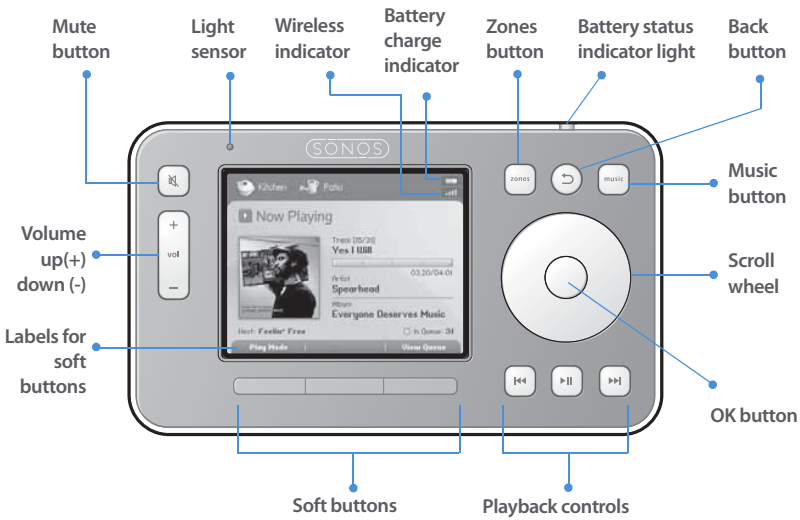
- Wireless control over all your music and all your zones from anywhere
- Intuitive control over your music and zones with full-color LCD screen and scroll wheel that makes it simple to:
  - browse songs
  - queue up tracks and playlists
  - select Internet radio stations
  - choose zones
  - control volume, playback and system settings

Controller Package Contents

- Sonos Controller CR100
- AC adapter with power cord
- Setup Instructions

Chapter 5

Using the Controller



Navigation

Zones. Use the **Zones** button to select a zone to play music in, or to view the music selections playing in each zone. You can also use this button to create or modify *zone groups* any time you want to share the same music across multiple zones.

Music. Use the **Music** button to browse or select music. From the **Music** menu you can select new music to play, manage your music queues, access playlists, and change the default settings for a Sonos ZonePlayer or Controller. The **Music** button will also toggle you between the Music menu and the Now Playing screen.

Back. Use the **Back** button to return to the previous screen in the selected menu (zone or music).

Scroll wheel. The scroll wheel is used to navigate through a displayed list whenever one is present on the Controller screen. Use your thumb or finger to "turn" the wheel clockwise to scroll down through the list, and counterclockwise to scroll up through the list.

OK button. Touch the "OK" button located in the center of the scroll wheel to make selections.

Soft buttons. The soft button functions change to reflect the available actions for the Controller screen currently displayed. The action for each button appears above it (for example **View Queue** or **Add to Queue**).

Playback

Play/pause. Toggles between playing and pausing the current track. However, when browsing music sources, if you highlight a playable item (track, album, artist, playlist) and press **Play**, the highlighted music item is added to the end of the music queue and begins to play immediately. This occurs whether the current track is in **Play** or **Pause** mode.

Next (short press). Jumps to the start of the next track in the music queue.

Fast forward (long press). Pressing and holding this button moves you forward through the current track. The music playback jumps to the new position when the button is released (while the button is held down, the song continues to play at the normal rate).

Previous (short press). If you are more than 3 seconds into the track, this button jumps to the start of the *current* track; if you are less than 3 seconds into the track, this button jumps to the start of the *previous* track.

Rewind (long press). Pressing and holding this button moves you backward through the current track. The music playback jumps to the new position when the button is released (while the button is held down, the song continues to play at the normal rate).

Volume

Volume controls. Use the volume control buttons to increase (+) or decrease (-) the volume in any zone, or across a zone group.

Mute. Use the **Mute** button to temporarily silence the music in a zone (within a zone group, the mute button automatically mutes the last room where volume controls were adjusted.) Touch the **Mute** button again to unmute. To mute all zones in the house, press and hold the **Mute** button for 3 seconds.

Controller sensors and indicators

Light sensor. The light sensor automatically turns on the button backlights based upon the lighting conditions of the environment.

Wireless signal strength indicator. Displays at the top of each screen to indicate the current strength of the Controller's wireless signal.

Battery status indicator light. Indicates the status of the battery charge:

- Lights *red* when the battery gets low, indicating that the Controller needs to be charged.
- Lights *amber* while the Controller is charging.
- Lights *green* when the Controller finishes charging.
- Unlit when your Controller is charged and not connected to the AC adapter.

Battery charge indicator. Displays at the top of each screen to indicate the Controller's remaining battery charge.

Motion sensor. The Controller has a motion sensor to automatically *wake* your Controller when motion is detected. Use the **Motion Sensor** setting on the **Controller Settings** menu to disable this feature.

Sleep modes

Light sleep. Your Controller will go into *light sleep* to preserve the battery life when it is unused for a specified period of time. The screen will turn off until motion is detected or a button is pressed. Use the **Sleep Timer Docked** (Controller is connected to power supply) and **Undocked** (Controller is not connected to a power supply) settings to select the amount of time after which your Controller will enter light sleep.

Deep sleep. Your Controller will go into *deep sleep* to preserve the battery life when it is unused for a specified period of time. When your Controller wakes from deep sleep - either from the motion sensor or from a button touch - it will go through a restart cycle that takes several seconds. Use the **Deep Sleep Timer** setting to select the amount of time after which your Controller will enter deep sleep.

Turn off Controller

Use this setting to put your Controller into deep sleep anytime it will not be in use for an extended period of time, or when you are transporting your Controller to another destination. This setting puts the Controller into deep sleep mode immediately rather than waiting for the deep sleep timer setting to be reached. The Controller cannot be turned off while it is connected to the AC adapter or charging cradle.

Resetting Your Controller

If your Controller's screen should freeze, press and hold the **Mute** and **Music** buttons simultaneously on the Controller for approximately 3 seconds. The Controller will restart momentarily.

Factory reset

If you want to join your Controller to a different Sonos Digital Music System, you must *factory reset* your Controller. Select **System Settings→Controller Settings→Advanced Settings→Factory Reset** from the **Music** menu.

The Welcome screen will appear on your Controller to prompt you through the setup process. To add your Controller to a Sonos Digital Music System that is already set up, you will be prompted to press and release the **Mute** and **Volume Up** buttons simultaneously on any ZonePlayer that is part of your music system.

Controlling the Volume

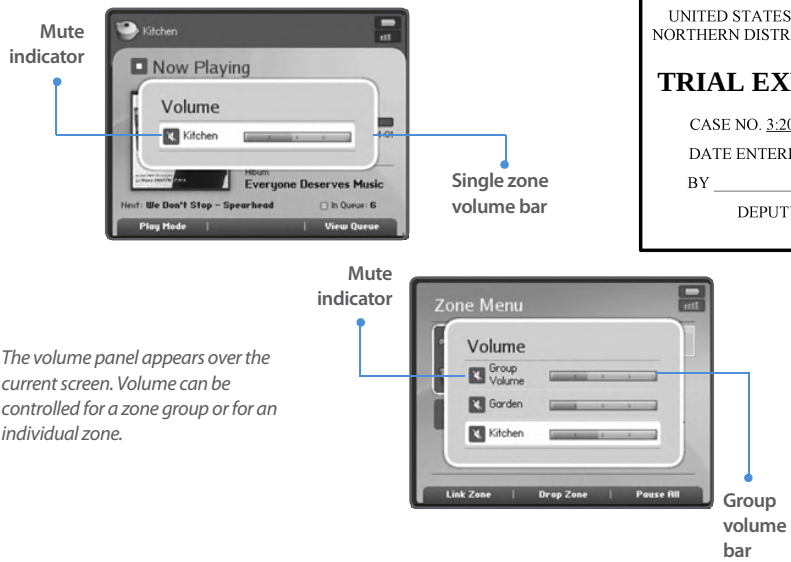
The Volume panel appears temporarily on your Controller screen when you press the **Volume** or **Mute** buttons. Highlight the zone or zone group you want to adjust **before** touching the volume control buttons.

If you have two or more zones grouped together, the *Group Volume* bar displays at the top. You can adjust the Group Volume bar to control the volume proportionately for the whole zone group, or select an individual zone to adjust the volume setting in just that zone.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

TRIAL EXHIBIT 0063

CASE NO. 3:20-cv-06754-WHA
DATE ENTERED _____
BY _____
DEPUTY CLERK



The volume panel appears over the current screen. Volume can be controlled for a zone group or for an individual zone.

To adjust volume or mute zones

1. From the **Zone** menu, use the scroll wheel to select the zone you want to change the volume settings for.
2. Use the **Volume Up** (+) and **Down** (−) buttons to change the volume to the desired level.
3. Touch **OK**, and the Volume panel disappears.
4. To mute a zone or a zone group, touch the **Mute** button (within a zone group, the mute button automatically mutes the last room where volume controls were adjusted.) Touch the **Mute** button again to unmute.
5. To mute all the ZonePlayers in your household, touch and hold the **Mute** button for 3 seconds. Touch and hold again for 3 seconds to unmute all ZonePlayers.

Exhibit
1078

The Controller Main Menus

Zone menu

- View zones
- Select zones
- Link or drop zones in a zone group
- Pause all ZonePlayers

Music menu

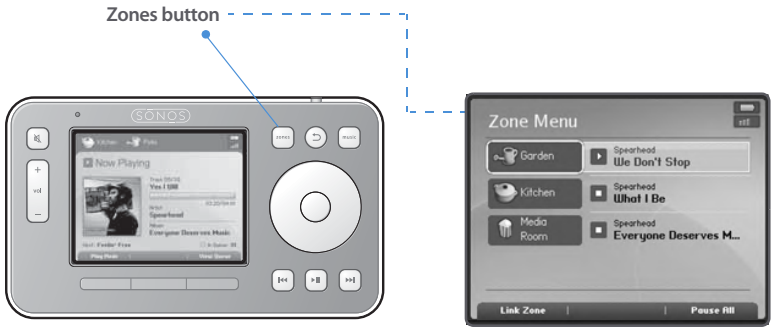
- Music Library
- Sonos Playlists
- Internet Radio
- Line-In Music Sources
- System Settings

Managing Your Zones

Touch the **Zones** button on your Controller to display the **Zone** menu where you can view the music selections playing in each room. From this menu, you can:

- See an alphabetical list of the zones in your household, along with the music currently playing in each zone
- Group zones together to play the same music across zones (create a *zone group*)
- Drop a zone from a zone group
- Pause all ZonePlayers in your household

Music will continue to play while you browse the **Zone** menu.



Touch the Zones button to view the music playing in each room

Music you select will play in the zone you highlight on the **Zone** menu. Use the scroll wheel to highlight a zone, and touch **OK**. The **Now Playing** window appears. You can then touch the **Music** button music to change the music selection for this zone.

Note: The currently selected zone will always show at the top of your Controller screen so you can see which zone you are making changes to.

Zone groups

Two or more zones can be grouped together to form a zone group, which allows you to play the same music across zones. You can also link all the ZonePlayers in your house with one touch by selecting **All Zones**-**Party Mode**. You can add and drop zones from a zone group while your music is playing.

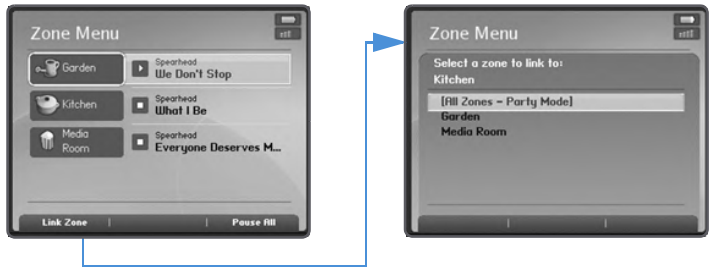
Note: Any zones you add to a group will automatically drop their current music queue and begin to play the music that is playing in the zone group. You may sometimes want to save your music queue as a Sonos playlist before linking zones. See "To save a music queue as a Sonos playlist" on page 5-15.

To add a zone to a zone group

1. Touch the **Zones** button on your Controller.

Select zone where desired music is playing

Select zone to add to group



2. Highlight the zone or zone group you want to add a zone to, and touch **Link Zone**.

Note: The order in which you add a zone makes a difference. If you select **Link Zone** from a zone where there is no music playing, any zone you link to it will also be silent.

3. Highlight the zone you want to add to the group, and touch **OK**. If you want to join all the zones in your house to this music queue, select **All Zones-Party Mode**. All of your ZonePlayers will then play the same music until you drop the zones from the zone group.

Kitchen and Garden make up a zone group

The music queue from the added zone is automatically replaced by the music queue from the zone or zone group it was linked to so that both zones play the same music

To drop a room from your zone group

1. Touch the **Zones** button on your Controller.

Select zone to drop from group

2. Use the scroll wheel to highlight the zone group you want to change, and touch **Drop Zone**.
3. Highlight the zone you want to drop from the group, and touch **OK**. The room that's removed from the zone group stops playing music. The other zones in the zone group continue unaffected.

To turn off all ZonePlayers

If you want to stop your Sonos Digital Music System from playing music, press **Pause All** from the **Zones** menu. All of your ZonePlayers will remain *off* until you touch **Play** to restart each zone or zone group.

Making Music Selections

Browsing your music library

You can browse for songs in a number of different ways. Using the Controller, you can make broad music selections like *play all available music by a particular artist*, or you can make specific selections like *play a single track by a particular artist on a specified album.* Selection choices include:

- Artist
- Album
- Composer
- Genre
- Tracks
- Imported Playlists
- Browse by Folder

Note: If a computer on your network is turned off or is in "standby" mode, the music folders on that computer are unavailable to the Sonos Digital Music System until the computer is turned back on.

The Music Queue

When you make music selections, they are added to a list of tracks called a *music queue*. You can create a different music queue for each zone in your house, or you can create a zone group and play the same music across multiple zones. A play indicator appears to the left of the currently playing track. When the current track ends, the next track in the queue starts to play, and play continues down through the list until the queue is completed. When you add tracks to a queue, they are placed at the end of the queue.

Note: You can add tracks to the music queue while other tracks in the queue are playing.

To select from your music library

1. From the **Zone** menu, highlight the zone where you want to play music, and then touch the **Music** button.
2. Select **Music Library,** and touch **OK**.

Note: The music you select will play in the zone or zone group that is currently showing at the top of your Controller screen.

3. Use the scroll wheel to browse the music library, and then highlight a selection.
4. Choose one of the following options:
   - Touch the **Play** button to play now.

Or,

   - Touch **Add to Queue** to add the selection to the end of your music queue.

Or,

   - Touch **OK** to *drill down* through the menu structure for more choices if an artist, album, composer, genre or folder is selected.

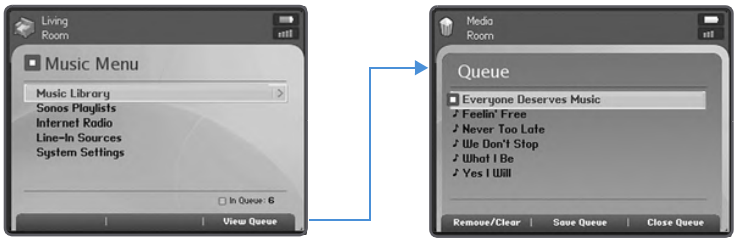
If you select by artist, all of your music by this artist is added to the music queue. To play a specific track by a particular artist, select **Music Library→Artist** and then touch **OK** to drill down through the menu structure until you see the track you want to play.

If you've created Sonos playlists (tracks you've organized into lists), you can play them anytime by selecting **Sonos Playlists** from the **Music** menu. For more information, see "To save a music queue as a Sonos playlist" on page 5-15.

Note: If you have WAV files in your music collection, they are only available for browsing and/or selection via **Track** or **Browse by Folder**, as WAV files do not contain detailed information such as artist, title and genre.

5. Touch the **Back** button at any time to return to the previous music screen.

Managing your music queue



Once you have added selections to a music queue, you can make changes to the queue list by selecting the View Queue soft button.

Note: Remember, the music you select will play in the zone or zone group that is currently showing at the top of your screen. To change zones, touch the **Zones** button.

- You can delete a track from the queue, or clear the entire queue.
- You can highlight a track in the queue list and touch **OK** to make it play now (the album art for this track then appears in the **Now Playing** window if it was saved with the track).
- You can save a music queue as a Sonos playlist.
- From the **Now Playing** screen, you can select **Play Mode** to cause the songs in the music queue to play in a different order.

To remove a track from the music queue

1. Touch **View Queue**.
2. Use the scroll wheel to highlight the song you want to remove from the queue.
3. Touch **Remove/Clear**.

4. Select **Remove Track**, and touch **OK**.

   The song disappears from the queue list.

To clear the music queue

1. Touch **Remove/Clear** from the **View Queue** window.
2. Select **Clear Queue**, and touch **OK**.

   This will clear the entire queue and the music will stop playing.

To change the play mode

1. From the **Zones** menu, touch **OK** to display the **Now Playing** screen.
2. Touch **Play Mode**.

Play mode icon

3. Use the scroll wheel to select a play mode, and touch **OK**.

The selected play mode appears as an icon on the **Now Playing** screen.

Shuffle. Plays the tracks in the music queue in a random order.

Repeat. Repeats the music queue after the last track has finished.

Shuffle/Repeat. Shows that both play modes are activated.

Creating and Managing Sonos Playlists

Sonos playlists are music queues you save for future listening. For example, you might want to create a *jazz* playlist, a *party* playlist, or an *easy listening* playlist.

To save a music queue as a Sonos playlist

1. From the **View Queue** window, touch **Save Queue**.

2. Select **OK** to save the playlist using the name displayed, or select **Enter a Different Name** and use the keyboard to type another name such as *jazz* or *party*.

3. Touch **OK** after each letter entry, and then **Accept** when finished.

You can access these saved Sonos playlists later from the **Music** menu.

To delete a Sonos playlist

1. From the **Music** menu, highlight **Sonos Playlists**, and touch **OK**.
2. Use the scroll wheel to highlight the playlist you want to delete, and touch **Delete Playlist**.
3. Highlight **Yes** to confirm, and touch **OK**.

Internet Radio

Sonos provides you with a selection of third-party streaming MP3 broadcasts, grouped by category. You can add additional radio stations using the Sonos Desktop Controller software. These additional stations are placed in your *Favorite Stations* folder.

1. From the **Music** menu, select **Internet Radio**.
2. Select the radio station category you want to choose from, and touch **OK**.

3. Select a radio station from the list, and touch the **Play** button. It immediately begins to play in the zone you have currently selected.

4. To add a radio station from the preset list to your Favorite Stations folder, touch **Add to Favorites**.

5. To add a radio station that does not appear in the Sonos supplied list, use the Desktop Controller software. See "To add an Internet radio station" on page 3-18 for additional information.

System Settings

You can control many of the settings and preferences for the Sonos Digital Music System using your Controller.

Music equalization. Control a ZonePlayer's sound settings.

Music library management. Manage your shared music folders.

Add a ZonePlayer. Add new ZonePlayers to your Sonos Digital Music System.

Rename ZonePlayers. Change the name of a ZonePlayer.

Controller settings. Adjust the preference settings for your Controller.

Online updates. Search for and download software updates for your Sonos Digital Music System. If you have not yet registered your music system, you will be prompted to register before you can download updates.

Advanced settings. The following advanced settings may be changed when necessary. Detailed information for each option is presented later in this chapter.

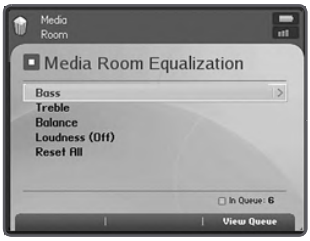
- **System registration**. If you did not register your music system during the setup process, you can use this option to register later.
- **Auto check for system updates**. This preference option allows Sonos to automatically check for you on the availability of system updates.
- **Auto update Internet radio station list**. This preference option allows Sonos to automatically update your Internet radio station list.
- **Line-in encoding**. Set the encoding for external music sources to WMA (default) or WAV.
- **Wireless channel**. Change the wireless channel used by your Sonos Digital Music System.

About your Digital Music System. Display detailed information regarding your Sonos Digital Music System.

Adjusting the Sound Settings for a ZonePlayer

You can change the sound settings (treble, bass, loudness, or balance) for each individual ZonePlayer.

1. From the **Music** menu, select **System Settings**→**Music Equalization**, and touch **OK**.
2. Use the scroll wheel to highlight the zone where you wish to change the settings, and touch **OK**.



A control slide appears on top of the current screen

3. Highlight the setting you wish to change, and touch **OK**.

4. Use the scroll wheel to make adjustments to the control slide that appears on the screen, and then touch **OK**.
5. If at any time you wish to change the settings for a ZonePlayer back to their original default values, select **Reset All.**

Managing Your Music Folders

You can add or remove the shared folders Sonos accesses music from at any time. You may need to make changes if you add a computer to your home network, or if you move shared folders from one location to another.

If you add new music to a folder that is already indexed, you can simply update your music index to add this music to your library.

To view your shared folders

1. From the **Music** menu, use the scroll wheel to highlight **System Settings**.
2. Highlight **Music Library Management**, and touch **OK**.

3. Highlight **Music Library Setup**, and touch **OK**.

The shared music folders that are currently accessible to your Sonos Digital Music System are displayed.

Note: If a computer on your network is turned off or is in *standby* mode, the music folders on that computer are unavailable to the Sonos Digital Music System until the computer is turned back on.

To add a new shared folder

1. To make another shared folder available to your Sonos Digital Music System, touch **Add New** from the **Selected Shared Folders** screen. Your network will be scanned for shared folders that your system is not currently accessing.

2. To select a shared folder from the displayed list, use the scroll wheel to highlight a shared folder, and touch the **OK** button.

3. If this shared folder **does not** require a username and password, touch **OK** and the selected folder is added to your music system. If this shared folder **requires** a username and password, continue on to step 4.

4. Touch **Type...** to enter a user name.
5. Type the name of a user with permission to access this shared folder, and touch **Accept**.
6. Use the scroll wheel to highlight the **Password** field and touch **Type...**
7. Type the password associated with this user, and touch **Accept**.
8. To add a shared folder that is not currently displayed in the list, touch **Add New**, and then **Enter New**.

9. Touch **Type** to enter the path for this folder, and then touch **Accept**.
10. Touch **OK**.

    If the folder is not shared anonymously, you will need to enter a username and password.
11. Use the scroll wheel to highlight the **Username** field and touch **Type**.
12. Type the name of a user with permission to access this folder, and then touch **Accept**.
13. Use the scroll wheel to highlight the **Password** field and touch **Type**.
14. Type the password associated with this user, and then touch **Accept**.
15. Touch **OK** to confirm.

To stop accessing a shared folder

1. From the **Music** menu, select **System Settings→Music Library Management→Music Library Setup**, and touch **OK**.

The shared music folders that are currently accessible to your Sonos Digital Music System are displayed.

2. Use the scroll wheel to select the folder you wish to stop using, and touch **Remove**.

3. Touch **OK** to confirm.

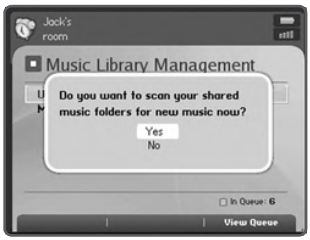
Your original folder will remain untouched on your computer. However you will no longer be able to access it from the Sonos Digital Music System.

To update your music index

During the setup process, all of your available music shares are indexed for easy selection. If you add new music to a folder that has already been indexed, you can update your music index to add this music to your library.

1. From the **Music** menu, select **System Settings**, and touch **OK**.

2. Use the scroll wheel to highlight **Music Library Management→Update Music Index Now**, and touch **OK.**



3. Highlight **Yes**, and touch **OK**.

The message, "updating music index" appears at the bottom of your Controller screen. When the message disappears, your new music is available.

Adding More ZonePlayers

You can add more ZonePlayers to your Sonos Digital Music System any time by selecting **System Settings→Add a ZonePlayer** from the **Music** menu. Turn to Chapter 2 if you'd like help with the placement and setup of your new ZonePlayer(s).

Renaming a ZonePlayer

1. From the **Music** menu, select **System Settings**→**Rename ZonePlayers** and touch **OK**.
2. Use the scroll wheel to highlight the ZonePlayer name you wish to change, and touch **OK.**
3. Use the scroll wheel to select a new name from the list, and then touch **OK**.

4. You can also type a unique name by selecting **Enter New.**

5. Use the scroll wheel to select each letter, touching **OK** after each entry.
6. Touch **Accept** to accept the new name, or touch **Cancel** to leave the screen without making a change.

Adjusting Your Controller's Settings

There are several settings you can change on your Sonos Controller to suit your household preferences.

From the **Music** menu, select **System Settings→Controller Settings** and then use the scroll wheel to highlight the setting you wish to change.

Click sound. Adjust this setting to turn the Controller's scroll wheel "clicking" on or off.

Sleep timer undocked. Use this setting to select the amount of time after which your Controller enters *light sleep* mode when not connected to a power supply. The screen will turn off until motion is detected or a button is pressed.

Sleep timer docked. Use this setting to select the amount of time after which your Controller enters *light sleep* mode when plugged into the adapter. Because the Controller is connected to a power supply during this time, you can set this sleep timer significantly higher than the undocked sleep timer setting.

Motion sensor. Use this setting to turn the motion sensor on or off. The motion sensor automatically *wakes* your Controller when motion is detected.

Advanced settings. The **Advanced Settings** menu provides you with 3 additional menu choices:

- **Deep sleep timer**. Use this setting to set the deep sleep timer (2, 4, 8, or 12 hours) for your Controller. Your Controller will go into *deep sleep* to preserve the battery life when it is unused for this specified period of time. When your Controller wakes from deep sleep - either from the motion sensor or from a button touch - it will go through a restart cycle which takes several seconds.

- **Turn off Controller**. Use this setting to put your Controller into *deep sleep* any time it will not be in use for an extended period of time, or when you are transporting your Controller to another destination. This setting puts the Controller into deep sleep mode immediately rather than waiting for the deep sleep timer setting to be reached. **The Controller cannot be turned off while it is connected to the AC adapter**.

- **Factory reset**. Use this setting to return the Controller to its original factory settings. This will disconnect the Controller from your Sonos Digital Music System entirely (you can add it again at any time.) This may be necessary if the Controller gets associated to the wrong music system during setup, or if you wish to join your Controller to another Sonos Digital Music System.

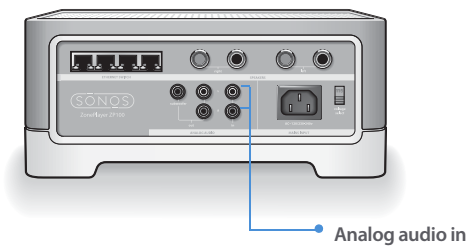
Connecting a Line-In Music Source

You can play music from an external line-in music source such as a CD player or portable music player that is connected to your Sonos Digital Music System.

Note: You can listen to music from an external device in any zone, and use the Sonos Digital Music System to control the volume settings. However, you must control the playback (forward, pause, etc.) from the line-in source. If you have WMA encoding selected, you will notice a slight delay before the music starts to play.

To connect a line-in music source

1. Use a standard RCA cable to connect the outputs from the external source to the *Audio in* connections on the back of your ZonePlayer.



2. From the **Music** menu, select **Line-In Sources** and touch **OK.**

3. Use the scroll wheel to select the zone where the external source is connected, and touch **OK**.

Getting Software Updates

Sonos periodically provides you with software updates to improve performance or to add new features. Your music system must be registered in order to receive updates.

There are two preference options available:

- Do not automatically check for updates. From the **Music** menu, you should periodically select **System Settings**→**Online Updates** to check for software updates.
- Send a message when an update is available. (To change your preference setting, see "Auto check for software updates" on page 5-29.) The message, "Update Available" will appear on the **System Settings** menu next to **Online Updates** to indicate there are new Sonos updates available.

1. Touch **OK** to contact Sonos.
2. If there is an update available, select **Yes** to begin the update process.

Your ZonePlayers and the Controller will be updated together as all Sonos components must carry the same software version number. This process may take several minutes per device, depending upon your network connection. Because this process can run unattended, Sonos recommends you start the update when you will be away from your Sonos Digital Music System for a period of time. If you have the Desktop Controller software installed, you will have to update it the next time you start the application.

Caution *Do not disconnect power from your ZonePlayer(s), or in any way disable your Sonos Digital Music System while this process is running. Contact Sonos Customer Support if an error occurs.*

Controller software updates

In the event that your Controller's software version gets out of sync from the rest of your Sonos Digital Music System components, you will see the following message displayed on your Controller screen the next time you use it:

This Controller will be unavailable for use until you perform a software update to bring the Controller up to date. This situation will occur if you perform a software update from another Controller, or from the Desktop Controller software.

ZonePlayer(s) software updates

If a ZonePlayer's software version gets out of sync from the rest of your Sonos Digital Music System components, you will see the following message displayed on your **Zones** menu:

One or more ZonePlayers may need to be updated if you purchase a new ZonePlayer with a later software version, or if you plug in a ZonePlayer that was not in use when you performed your last software update.

You will also see this message if you have already updated your music system using the Controller. This message will indicate that the Desktop Controller software needs to be updated.

Touch **OK** to begin the software update process.

Advanced Settings

Upon occasion, it may be necessary to adjust some of the settings for your Sonos Digital Music System. You can also use the **Advanced Settings** menu to register your music system if you have not yet registered it.

System registration

During the setup process, you are asked to register your Sonos Digital Music System. If you did not register at that time, you can register now. Registering your music system allows you to receive technical support as well as software upgrades. At no time is any of your information provided to other companies.

1. From the **Music** menu, select **System Settings**.
2. Select **Advanced Settings**→**System Registration**.

Auto check for software updates

Sonos can automatically check your system for available software updates. Your music system must be registered in order to receive software updates. Change your preference by following the steps below.

1. From the **Music** menu, select **System Settings**.
2. Select **Advanced Settings**→**Auto Check for Software Updates**.
3. Select **On** to turn auto checking on, or **Off** to turn auto checking off, and then click **OK**.

Auto update Internet radio station list

You can receive automatic radio station updates whenever Sonos releases a new list. Your music system must be registered in order to receive updates. Change your preference by following the steps below.

1. From the **Music** menu, select **System Settings**.
2. Select **Advanced Settings→Auto Update Internet Radio Station List**.
3. Select **On** to turn auto update on, or **Off** to turn auto update off, and then click **OK**.

Line-in encoding

If you have line-in music sources attached to a ZonePlayer, line-in encoding determines how the Sonos Digital Music System will encode the audio coming in from these sources. WMA encoding is the high-quality system default. For the highest quality sound you can select WAV uncompressed encoding (this selection requires more network bandwidth than WMA compressed audio).

1. From the **Music** menu select **System Settings.**
2. Select **Advanced Settings →Line-In Encoding**.
3. Use the scroll wheel to select **WAV** or **WMA** encoding, and touch **OK**. When WMA is selected, you will notice a slight delay before the music starts to play.

Wireless channel

The Sonos Digital Music System selects the optimal radio frequency channel during setup. However, if you have other wireless devices using this channel, you may want to switch the Sonos Digital Music System to another channel to avoid conflicts, as conflicts may cause audio drop-outs.

1. From the **Music** menu select **System Settings.**
2. Select **Advanced Settings →Wireless Channel**.

   Use the scroll wheel to select a different wireless channel, and touch **OK**.

It may take several seconds for the switch to take effect. If you have music playing, a short music dropout will occur during the wireless channel change.

Battery Charging

Your Controller can be recharged by plugging it into the AC adapter supplied with your Controller. The battery charge indicator on your Controller will show you when it is time to recharge the Controller. If the battery charge gets very low, the battery status indicator light will light red. *Be sure to recharge using only the AC adapter supplied with your Sonos Controller.*

Caution *Use only the supplied power adapter to charge the Controller's battery. Using another adapter will damage your Controller and void your product warranty.*

Battery Replacement

After several years (depending upon usage), the battery on your Controller may not hold a charge as long as it once did. Because of the Controller's splash-resistant design, the battery on the Controller must be factory-replaced. Return it to the Sonos Service Center where it will be promptly replaced and returned to you. Go to *http://support.sonos.com* for instructions and battery replacement cost.

Caution *Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type. Return to Sonos or an authorized Sonos service center for replacement.*

Installation Tips and Basic Troubleshooting

Basic Troubleshooting

Warning *Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is a risk of electric shock.*

If a problem occurs, first check the solutions listed below. If you are unable to remedy the problem by following these hints, go to the Sonos Service Center at http://support.sonos.com, or telephone us at (800) 680-2345.

Problem	Solution
The ZonePlayer Status indicator is not lit and no sound is produced when unit is plugged in.	Check the insertion of the power cord plug.
The ZonePlayer Status indicator is lit, but there is no sound.	• Make sure speakers are connected securely. • Make sure volume is set to a suitable level. • Make sure MUTE is not on.
Sound is produced from only one speaker.	• Make sure speaker is connected securely. • Make sure balance control is set correctly.

A

Problem	Solution
The ZonePlayer does not operate properly.	• Check to ensure that the ZonePlayer Status indicator on the front of the ZonePlayer is illuminated and solid white. • Check to ensure that the green link light is lit on the Ethernet switch on the rear panel of the ZonePlayer that is wired into your network. • Move the Controller closer to the ZonePlayer. • Check to ensure there are no obstacles to impede wireless operation. • The ZonePlayer may need to be reset. Disconnect the power cord for 5 seconds and then reconnect. Wait for the ZonePlayer to restart. • If none of these work, the ZonePlayer may need to be factory reset. Disconnect power and then reconnect while pressing and holding the **Mute** button until the amber light begins to flash. **Note:** *You should not factory reset all of your ZonePlayers at once or all preferences and playlists will be lost.*
The Controller screen is frozen.	Your Controller may need to be reset. Press and hold the **Mute** and **Music** buttons simultaneously on the Controller for approximately 3 seconds. The Controller will reset itself momentarily.
The Controller screen is not displaying proper zones, or displays the message, "Searching for ZonePlayers..."	• Make sure at least one ZonePlayer is plugged in and its Status indicator is illuminated solid white. • Move the Controller closer to the ZonePlayer. • Your Controller may be configured to work with a different Sonos Digital Music System. Disconnect the Controller from your music system, and then re-add it. To disconnect the Controller: • Touch **System Settings→Controller Settings→Advanced Settings→Factory Reset** from the **Music** menu. Or, • If the message "Searching for ZonePlayers" is displayed, touch **Settings→Factory Reset**.

Problem	Solution
The ZonePlayer Status indicator changes to solid amber.	This indicates that the ZonePlayer is experiencing an overheat condition. • Check the ZonePlayer vents for adequate cooling • Check for speaker shorts • Mute ZonePlayer or unplug it for several minutes to allow it to cool
The ZonePlayer has stopped playing music. The ZonePlayer Status indicator lights are flashing (long amber, short white, repeat)	If the inadequate cooling condition (above) is not remedied, the ZonePlayer will automatically mute itself to prevent damage to the ZonePlayer. • Check the ZonePlayer vents for adequate cooling • Check for speaker shorts • Leave ZonePlayer muted or unplug it for several minutes to allow it to cool
Cannot access Internet radio, online updates, or system registration.	• Your firewall may be blocking outgoing connections to the Internet. Ensure the firewall allows access to the Internet for the Ethernet MAC addresses of your Sonos components. • Your firewall may be configured so that Sonos components cannot obtain an IP address. If so, your ZonePlayers and Controllers will display an IP address in the 169.254.xxx.yyy range even though there is a router/DHCP server on the network.The DHCP server built in to some routers may be configured to supply IP addresses only to devices with specific permitted Ethernet MAC addresses. If you have configured your router in this way, you will need to grant permission to the Ethernet MAC address of each Sonos component (including the Controller) before setting up your system. Go to *http://faq.sonos.com/dhcp* for more information.

Problem	Solution
Why is there a delay when I play music from an external music source?	If WMA is selected as the encoding method for your line-in music source, you will notice a slight delay before the music starts to play.
The wrong album art, or no album art appears.	Please visit our Website at *http://faq.sonos.com/art* for details on how album art is located and displayed.
When I use my 2.4 GHz cordless phone, the music stops.	• Change the wireless channel your Sonos Digital Music System is operating on by selecting **System Settings→Advanced Settings→Wireless Channel**.
The Controller does not work in some parts of my home.	• Move the Controller closer to a ZonePlayer • Change the wireless channel by selecting **System Settings→Advanced Settings→Wireless Channel**.
Some Internet radio stations do not play.	Internet radio stations are broadcasts provided by 3rd parties. Problems related to the reliability of stations should be directed to the broadcaster directly. Go to *http://faq.sonos.com/radio* for additional information.
Some of my music is not showing in my music library.	• Some music formats are not currently supported by the Sonos Digital Music System. Unsupported format files do not display in your music library. • If you recently added music to your computer or to another networked device, you may need to update your Sonos music index. To update the music index from your Controller, see "To update your music index" on page 5-22. To update from the DCR, see "To update your music index" on page 3-24.

ZonePlayer LED Explanations

State	Mute Button Indicator	ZonePlayer Status Indicator	Additional Information
Powered up, connected to a Sonos Digital Music System	Off	Solid white	
Muted room	Solid green	Solid white	
Muted whole house	Flashing green to solid green	Solid white	
Powering up (booting)	Off	Flashing white	
Powered up, not connected to a Sonos Digital Music System	Flashing green	Flashing white	Flashing in unison
Looking for a Sonos Digital Music System	Flashing green	Flashing white	Flashing alternately
Powering up in reset mode	Off	Flashing amber	

State	Mute Button Indicator	ZonePlayer Status Indicator	Additional Information
ZonePlayer overheat warning		Solid amber	The ZonePlayer is beginning to experience an inadequate cooling condition and will reduce to 75% volume • Check the ZonePlayer vents for adequate cooling • Check for speaker shorts • Mute the sound or unplug the ZonePlayer for several minutes to allow it to cool
ZonePlayer overheat shutdown (mute)		Long amber, short white, repeat	If the inadequate cooling condition (above) is not remedied, the ZonePlayer will automatically mute itself to prevent damage to the ZonePlayer
Diagnostics mode		Solid or flashing red	You may be instructed to enter Diagnostics mode by a technician when you call Customer Support to report a problem. If you inadvertently enter diagnostics mode, touch the **Mute** button to exit.

About Your Music System

If you make a call to Sonos Customer Support, you may be asked for specific details regarding your Sonos Digital Music System. You can find this information by choosing one of the following options:

- From the *Sonos Controller* **Music** menu, select **System Settings**→**About Your Digital Music System**.

Or,

- From the *Sonos Desktop Controller* menu bar, select **Help**→**About Sonos Desktop Controller**.

Or,

- From the *Sonos Setup Assistant* menu bar, select **Sonos**→**About Sonos Assistant**.

Support Diagnostics

Support Diagnostics should only be accessed when you are talking with a Sonos Support representative (800-680-2345). For general Sonos support information, go to *http://sonos.com/support*.

From the Desktop Controller software:

1. Click **File** →**Preferences** →**Support Diagnostics**.
2. Click **Submit Diagnostics** if you are instructed to do so by your Sonos Support representative.

From the Sonos Assistant software:

1. From the **Sonos** menu, click **About Sonos Assistant**.
2. Click the Setup Assistant icon, and then click the **Upload Diagnostics** pop-up.
3. Click **Submit** if you are instructed to do so by your Sonos Support representative.

Sonos™ Device Specifications

Sonos ZonePlayer ZP100

Feature	Description
Audio Section	
Rated Output	50W min RMS per channel (8 Ohms, 20-20kHz, THD+N < 0.02%)
Speaker Connections	Spring binding posts
Line In	Auto-detecting RCA type
Line Out	RCA type, variable audio output
Subwoofer Output	Auto-detecting RCA type, 80 Hz crossover
Music Access	
File Types Supported (44.1 kHz)	MP3, WMA, AAC (MPEG4), WAV, AIFF, FLAC, Ogg Vorbis Note: *Firmware upgradable to support future audio formats. DRM-encrypted files not currently supported.*
File Storage Supported	Windows 2000, Windows XP or later, including Windows XP Media Center; Macintosh OS X or later; network-attached storage (NAS) devices supporting CIFS
Internet Radio	Streaming MP3

B

Feature	Description
Ethernet Connection	4-port switch, 10/100 Mbps, auto MDI/MDIX
Wireless Connectivity	Sonosnet™, a secure peer-to-peer wireless mesh network
General	
Power Supply	AC 120/240, 50-60 Hz, user-switchable
Front Panel Buttons	Volume and Mute
Front Panel LED Indicators	ZonePlayer Status and Mute Status
Dimensions	10.2" x 8.2" x 4.4" (260 x 209.5 x 113 mm)
Weight	10 lbs. (4.5 kg)
Operating Temperature	32 º to 104º F (0º to 40º C)
Finish	Die-cast matte aluminum enclosure on light gray base

* All specifications subject to change without notice.

Sonos Controller CR100

Feature	Description
Display and User Interface	
Screen Type	3.5" (diagonal) color LCD with LED backlighting
Screen Resolution	240 x 320 (QVGA)
Browse Control	Touch-sensitive scroll wheel with center-mounted selector button
Function Buttons	9 backlit buttons, 3 soft-selector buttons below screen
Indicators	Wireless signal strength and battery charge indicator (on-screen), battery status indicator LEDs
Power/Connections	
Battery Type Battery Charging Time	Rechargeable Li-ION Polymer, factory replaceable 2 hours to full charge
DC Charger	Input 100-240 VAC, 50/60 Hz Output 6 VDC, 3.8 A
Auxiliary Power Connection	Bottom-mounted charger contacts
Wireless Connectivity	Sonosnet™, a secure peer-to-peer wireless mesh network
General	
Dimensions	6.5" x 3.8" x 0.95" (165mm x 97mm x 24.5mm)
Weight	12.5 oz. (360 g)
Finish	Metal cladding on light gray enclosure, splash-resistant

* All specifications subject to change without notice.

System Setup-Without Windows® or Macintosh® OS X

If your operating system is not Windows XP, Windows 2000, or Macintosh OS X 10.2 or later, you can use the Sonos Controller to configure your music system and set up access to your music files. The Sonos Digital Music System will recognize many standard shared folders on your computer. For additional information, visit our Web site at *http://faq.sonos.com/shares*.

If you have digital music files stored on a computer or other device on your home network such as network-attached storage (NAS), the computer directories or folders that contain these music files must be *shared* so that the Sonos Digital Music System can access them. Before you begin, enable *file sharing* on each computer that holds the music files you want to access.

Note: If you have just purchased a new Sonos Controller CR100, you should charge the battery. Connect your Sonos Controller to the power adapter using the adapter cable (see the Controller Quick Setup Instructions.) **You can use your Controller while it is charging.**

C

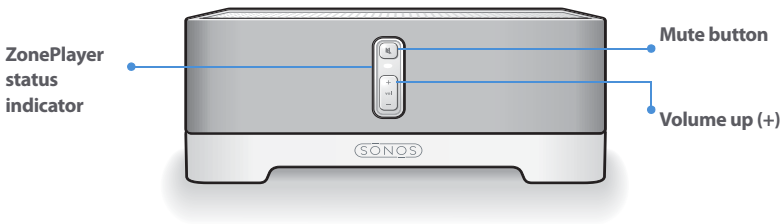
Setup Using the Sonos Controller

1. From the **Welcome** screen, touch **OK** to begin the setup process.

2. Follow the Controller's on-screen prompts to connect and then name your ZonePlayer.

Press and release the Mute and Volume Up buttons simultaneously on this ZonePlayer. You may release the buttons as soon as the Mute indicator (green) and the ZonePlayer Status indicator (white) start to blink alternately.

Successful connection



Once the ZonePlayer is successfully connected, the ZonePlayer Status indicator will stop flashing and change to solid white (normal operation), and the Mute indicator will go off.

3. Touch **OK**.
4. When you see the message **System is Now Setup**, touch **OK**.
5. Touch the **Music** button, and then select **System Settings** →**Music Library Management** →**Music Library Setup**.

6. Touch **Add New**.

7. Touch **Enter New**.

8. Touch **Type** to enter the path for this folder, and then touch **Accept**.
9. Touch **OK**.

   If the folder is not shared anonymously, you will need to enter a username and password.
10. Use the scroll wheel to highlight the **Username** field and touch **Type**.
11. Type the name of a user with permission to access this folder, and then touch **Accept**.
12. Use the scroll wheel to highlight the **Password** field and touch **Type**.
13. Type the password associated with this user, and then touch **Accept**.
14. To add another ZonePlayer to your music system, turn to "Adding More ZonePlayers" on page 2-7.

Turn to Chapter 5 to read more about the features and functions of your Sonos Controller.

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